| UNITED STATES MEMORANDUM | GOVERNM | ENT February 15, 2019 | | | | | | |
|-----------------------------|-----------------|--|--|--|--|--|--|--|
| То: | Public | c Information (MS 5030) | | | | | | |
| From: | Plan (5231) | Plan Coordinator, FO, Plans Section (MS 5231) | | | | | | |
| Subject: | Publi | c Information copy of plan | | | | | | |
| Control # | - | S-07926 | | | | | | |
| Туре | - | Supplemental Development Operations Coordinations Document | | | | | | |
| Lease(s) | - | OCS-G32112 Block - 265 West Cameron Area | | | | | | |
| Operator | - | EnVen Energy Ventures, LLC | | | | | | |
| Description | - | Well B-1, Platform B | | | | | | |
| Rig Type | - | Not Found | | | | | | |

Attached is a copy of the subject plan.

It has been deemed submitted as of this date and is under review for approval.

Robert Arpino Plan Coordinator

| Site Type/Name | Botm Lse/Area/Blk | Surface Location | Surf Lse/Area/Blk |
|----------------|-------------------|-------------------|-------------------|
| FIXED/B | | 8009 FNL, 938 FWL | G32112/WC/265 |
| WELL/B-1 | G32112/WC/265 | 8009 FNL, 938 FWL | G32112/WC/265 |



SUPPLEMENTAL DEVELOPMENT OPERATIONS COORDINATION DOCUMENT

WEST CAMERON BLOCK 265

LEASE NO. OCS-G 32112

OFFSHORE, LOUISIANA

PUBLIC DATA

Record of Change Log

| Submission Type | Date Sent to BOEM | Summary of Submission | Page Numbers |
|--------------------|----------------------|-----------------------|-----------------|
| | | | |
| | | | |
| | | | |

Prepared By:

Cheryl Powell EnVen Energy Ventures, LLC 333 Clay Street, Suite 4200 Houston, TX 77002 713-335-7041 cpowell@enven.com

Date of Submittal: November 19, 2018 Estimated Start-up Date: August 1, 2019

Cheryl Powell

From: Sent: To: Subject: notification@pay.gov Tuesday, November 20, 2018 2:46 PM Cheryl Powell Pay.gov Payment Confirmation: BOEM Development/DOCD Plan - BD



An official email of the United States government



Your payment has been submitted to Pay.gov and the details are below. If you have any questions regarding this payment, please contact Brenda Dickerson at (703) 787-1617 or BseeFinanceAccountsReceivable@bsee.gov.

Application Name: BOEM Development/DOCD Plan - BD Pay.gov Tracking ID: 26DKFN0V Agency Tracking ID: 75619729849 Transaction Type: Sale Transaction Date: 11/20/2018 03:46:01 PM EST Account Holder Name: David Carmony Transaction Amount: \$4,238.00 Card Type: Visa Card Number: *******6917

Region: Gulf of Mexico Contact: Cheryl Powell 713335-7041 Company Name/No: EnVen Energy Ventures, LLC, 03026 Lease Number(s): 32112, , , Area-Block: West Cameron WC, 265: , : , : , : , Type-Wells: Supplemental Plan, 1

THIS IS AN AUTOMATED MESSAGE. PLEASE DO NOT REPLY.



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Supplemental Development Operations Coordination Document Lease OCS-G 32112, West Cameron Block 265

TABLE OF CONTENTS

- SECTION A Contents of Plan
- SECTION B General Information
- SECTION C Geological, Geophysical Information
- SECTION D Hydrogen Sulfide Information
- SECTION E Mineral Resource Conservation
- SECTION F Biological, Physical and Socioeconomic Information
- SECTION G Wastes and Discharge Information
- SECTION H Air Emissions Information
- SECTION I Oil Spill Information
- SECTION J Environmental Monitoring Information
- SECTION K Lease Stipulations
- SECTION L Environmental Mitigation Measures Information
- SECTION M Related Facilities and Operations
- SECTION N Support Vessels and Aircraft Information
- SECTION O Onshore Support Facilities Information
- SECTION P Coastal Zone Management Act (CZMA) Information
- SECTION Q Environmental Impact Analysis
- SECTION R Administrative Information

SECTION A CONTENTS OF PLAN

A. PLAN INFORMATION FORM

EnVen Energy Ventures, LLC submits this Supplemental Development Operations Coordination Document to allow for the sidetrack drilling and completion of existing Lease OCS-G 32113, Well No. B-1, West Cameron Block 266 (to be designated Well No.B-1 ST00BP00, Lease OCS-G 32112, West Cameron Block 265) and commencement of production. Information regarding the proposed location are included on the OCS Plan Information Forms BOEM-137, **Attachments A-1 thru A-5**.

B. LOCATION

A location and bathymetry plat, prepared in accordance with Notice to Lessees (NTL) 2008-G04, depicting the surface location, bottom-hole location and water depth of the proposed well are Included as **Attachment(s) A-6 and A-7.** The sidetrack well will be drilled from the existing B platform located in West Cameron Block 265.

There will not be any anchors associated with the proposed operations.

C. SAFETY AND POLLUTION PREVENTION FEATURES

During the proposed development activities, EnVen will utilize a typical jack-up drilling rig. Rig specifications will be made part of each Application for Permit to Drill.

Safety features on the drilling unit will include well control, pollution prevention, welding procedure and blowout prevention equipment as described in Title 30 CFR Part 250, Subparts C, D, E, G and O and as further clarified by the BSEE Notices to Lessees, and current policy making invoked by the BSEE.

The BSEE is required to conduct onsite inspections of offshore facilities to confirm operators are complying with lease stipulations, operating regulations, approved plans, and other conditions, as well as to assure safety and pollution prevention requirements are being met. The National Potential Incident of Noncompliance (PINC) List serves as the baseline for these inspections. The BSEE also inspects the stockpiles of equipment listed in the operator's approved Regional Oil Spill Response Plan that would be used for the containment and cleanup of hydrocarbon spills.

Appropriate life rafts, life jackets, ring buoys, etc., will be maintained on the facility at all times as mandated by the U.S. Coast Guard regulations contained in Title 33 CFR.

Supervisory and certain designated personnel on-board the facility will be familiar with the effluent limitations and guidelines for overboard discharges into the receiving waters, as outlined in the NPDES General Permit GMG 290000.

Pollution prevention measures include installation of curbs, gutters, drip pans, and drains on drilling deck areas to collect all contaminants and debris.

D. STORAGE TANKS AND PRODUCTION VESSELS

Information regarding the storage tanks that will be used to conduct the drilling operations proposed in this plan that will store oil, as defined at 30 CFR 254.6 is provided in the table below. Only those tanks with a capacity of 25 barrels or more are included.

| Type of Storage Tank | Type of Facility | Tank Capacity (bbls) | Number of Tanks | Total Capacity (bbls) | Fluid Gravity (API) |
|--------------------------|---------------------|----------------------------|--------------------|-----------------------------|---------------------------|
| Fuel Oil (Marine Diesel) | Jack-up | 1418 | 2 | 2836 | 32.4° |

E. POLLUTION PREVENTION MEASURES (FLORIDA ONLY)

According to NTL 2008-G04, pollution prevention measures are not required for these proposed operations.

F. ADDITIONAL MEASURES

EnVen does not propose additional safety, pollution prevention, or early spill detection measures beyond those required by 30 CFR 250.

U.S. Department of the Interior Bureau of Ocean Energy Management

OCS PLAN INFORMATION FORM

| General Information | | | | | | | | | | | |
|--------------------------------|----------------|---|----------|---------------------------------|----------|----------|-----------------|-----------|-----------|---------|--------------|
| Type of OCS Plan: | Explora | ploration Plan (EP) Development Operations Coordination Document (DOCD) X | | | | | x | | | | |
| Company Name: EnVen En | ergy Venture | es, LLC | | BOEM (| Operator | Numbe | er: 03026 | | | | • |
| Address: 333 Clay St., Suit | e 4200 | | | Contact | Person: | Cheryl | Powell | | | | |
| Houston, TX 770 | 02 | | | Phone N | lumber: | 713-33 | 5-7041 | | | | |
| | | | | E-Mail A | Address: | cpowe | ell@enven.com | | | | |
| If a service fee is required u | nder 30 CFR | 550.125(a), pro | ovide t | he | Amoun | t paid | \$4238 | Receip | t No. | 7 | 5619729849 |
| | | Project and | Wors | st Case I | Discha | rge (V | VCD) Inform | nation | | | |
| Lease(s): G 32112 | A | Area: WC | Block | (s): 265 | Project | Name (| If Applicable): | | | | |
| Objective(s) X Oil X | Gas | Sulphur | Salt | Onshor | e Suppo | rt Base | (s): Cameron, L | A | | | |
| Platform/Well Name: B001 | (ST01) T | Total Volume of | fWCD |):12,945 B | OPD | | | API Grav | rity: 34° | | |
| Distance to Closest Land (M | liles): 56 | | Volu | me from u | ncontrol | led blov | wout: 12,910 BC | OPD | | | |
| Have you previously provide | ed informatio | on to verify the | calcula | ations and | assumpt | ions for | r your WCD? | | Yes | X | No |
| If so, provide the Control Nu | umber of the | EP or DOCD w | ith wh | nich this in | formatio | on was j | provided | 8.2 | | | • |
| Do you propose to use new o | or unusual tee | chnology to con | nduct y | our activit | ties? | | | | Yes | X | No |
| Do you propose to use a ves | sel with anch | ors to install or | modif | y a structu | ıre? | | | | Yes | X | No |
| Do you propose any facility | that will serv | ve as a host faci | lity for | r deepwater subsea development? | | | | | Yes | X | No |
| De | scription o | of Proposed | Activ | vities and | d Tent | ative S | Schedule (M | ark all t | that appl | y) | |
| Propos | sed Activity | | | Sta | art Date | l. | End Da | ate | | N | o. of Days |
| Exploration drilling | | | | | | | | | | | |
| Development drilling | | | | 08/01/2019 9/15/20 | | | 9/15/2019 | 19 45 | | | |
| Well completion | | | | 09/16/2019 | | | 10/01/19 | | | | |
| Well test flaring (for more th | nan 48 hours) |) | | | | | | | | | |
| Installation or modification | of structure | | | | | | | | | | |
| Installation of lease term pip | elines | | | | | | | | | | |
| Commence production | | | | 10/02/1 | 19 | | | | | | |
| Other (Specify and attach de | escription) | | | | | | | | | | |
| Descri | ption of D | rilling Rig | | | | | Dese | cription | of Struc | ture | |
| X Jackup | | Drillship | | | | Caiss | on | | Tension | leg pl | atform |
| Gorilla Jackup | | Platform rig | | | Х | Fixed | l platform | | Complia | ant tov | ver |
| Semisubmersible | | Submersible | | | | Spar | | | Guyed t | ower | |
| DP Semisubmersible | | Other (Attac | h Desc | cription) | _ | Float | ing production | | Other (A | Attach | Description) |
| Drilling Rig Name (If Know | m): | | | | | syste. | | | | | |
| T. | | De | scrip | tion of I | Lease | [erm] | Pipelines | | | | |
| From (Facility/Area/Bloo | ck) | To (Facility/A | rea/B | lock) | | Dia | umeter (Inches) | | | Len | igth (Feet) |
| | | | | | _ | | | | | | |
| | | | | | | | | | | | |
| 1 | | | | | | | | | | | |

OCS PLAN INFORMATION FORM (CONTINUED)

Include one copy of this page for each proposed well/structure

| Proposed Well/Structure Location | | | | | | | | | | | | | | |
|---|--|------------------------------|---------------------------|------------|------------------------|-------------------------------|-------------------------|------------|--------|-------------------------------------|------------------------------|-------------------------|-----------------------------|--------------------|
| Well or Structu structure, refer | cture Name/Number (If renaming well or erence previous name): B | | | | | iously reviev D? | ved under an a | approved | EP or | X | Yes | | No | |
| Is this an existing well X Yes No If this is an existing well or structure, list the Complex ID or API No. 2340 | | | | | | | | | | | | | | |
| Do you plan to | use a sub | sea BOP or a | surface BOI | on a float | ting fac | ility to cond | uct your prope | osed activ | ities? | | Ye | es | Х | No |
| WCD info | For wells blowout | , volume of (Bbls/day):12 | uncontrolled 2910 BOPD | Fe pi | or struc pelines | ctures, volum s (Bbls): 35 | e of all storag BOPD | ge and | 1 | API C fluid | iravity | of | 34° | |
| | Surface | Location | | | Botto | m-Hole Loc | ation (For W | ells) | | Com enter | pletion • separ | ı (For ate lin | [,] multip nes) | le completions, |
| Lease No. | OCS-G 3 | 2112 | | | | | | | | OCS OCS | | | | |
| Area Name | West C | ameron | | | | | | | | | | | | |
| Block No. | 265 | | | | | | | | | | | | | |
| Blockline Departures (in feet) | N/S Depa | arture: 800 | 6' FNL | | N/S E | Departure: | | F | _L | N/S I N/S I N/S I | Depart Departi Departi | ure: nre: nre: | | FL FL FL |
| | E/W Dep | parture: 937' | FWL | | E/W I | Departure: | | F | _L | E/W E/W E/W | Depart Depart Depart | ture: ture: ture: | | FL FL FL |
| Lambert X- Y coordinates | X: 1,421,904.830' | | | | X: | | | | | X: X: X: | | | | |
| | Y: 105,3 | 81.6" | | | Y: | | | | | Y: Y: Y: | | | | |
| Latitude/ Longitude | Latitude | 28°56'38.07 | 7" | | Latitude | | | | | Latitude Latitude Latitude | | | | |
| | Longitud | e -93°08'26 | .082" | | Longitude | | | | | Longitude Longitude Longitude | | | | |
| Water Depth (J | Feet): 77' | | | | MD (Feet): TVD (Feet): | | | | 1 | MD (MD (| (Feet): (Feet): | | TVD TVD | (Feet): (Feet): |
| Anchor Radius | (if applica | able) in feet: | N/A | | | | | | | MD (| (Feet): | | TVD | (Feet): |
| Anchor Lo | cations f | or Drillin | g Rig or C | onstruct | tion B | arge (If an | chor radius s | supplied a | above, | not n | ecessa | ry) | 0) | |
| Anchor Name or No. | Area | Block | X Coordii | nate | | Y Coordii | nate | | Lengt | h of A | Ancho | Chai | in on Se | afloor |
| | | | X = | | | Y = | | | | | | | | |
| | | | X = | | | Y = | | | | | | | | |
| | | | X = | | | Y = | | | | | | | | |
| | _ | X = | | | | Y = | | | | | | | | |
| | | _ | л – Х = | | | 1 - V = | | | | | | | | |
| | | | X = | | | Y = | | | | | | | | |
| | | | X = | | | Y = | | | | | | | | |

Form BOEM- 0137 (December 2011- Supersedes all previous editions of this form which may not be used.)

OCS PLAN INFORMATION FORM (CONTINUED)

Include one copy of this page for each proposed well/structure

| Proposed Well/Structure Location | | | | | | | | | | | | | |
|-----------------------------------|--------------------------|----------------------------|--------------------------|--|------------------------|-------------------------------------|-----------------------|---------|----------------|----------------------|--------------|----------|------------------------|
| Well or Structure, refere | re Name/N ence previo | Number (If r ous name): | enaming we B-1 | ll or | Prev DOC | iously reviewed CD? | under an approved | EP or | x | Yes | | No | |
| Is this an existing or structure? | ng well | X Y | Zes | No If the Contract of the Cont | nis is an | n existing well o | r structure, list the | | | | | | |
| Do you plan to | use a subs | sea BOP or a | a surface BC | DP on a floa | ting fac | cility to conduct | your proposed activ | vities? | T | Ye | s | х | No |
| WCD info | For wells | , volume of Bbls/day):1 | uncontrolle 2910 BOPD | d F | or struc | ctures, volume c s (Bbls): 35 BC | f all storage and | | API C fluid | Gravity | of | 34° | |
| | Surface 1 | Location | | P | Botto | om-Hole Locati | on (For Wells) | | Com | pletior | ı (For | multip | le completions. |
| Lesse No | OCS-G3 | 2112 | | | OCS- | G 32112 | | | enter | r separ | ate li | nes) | |
| Lease 110. | 005-03 | 2112 | | | 005 | 0 52112 | | | OCS | | | | |
| Area Name | West C | ameron | | | Wes | t Cameron | | | | | | | |
| Block No. | 265 | | | | 265 | | | | | | | | |
| Blockline | N/S Depa | arture: 800 | 06' FNL | | N/S I | Departure: | | | N/S | Departi | ire: | | FL |
| Departures (in feet) | | | | | | | | | N/S I | Departı Departı | ire: ire: | | FL FL |
| | E/W Dep | arture: 937 | ' FWL | | E/W | Departure: | | | E/W | Depart | ure: | | L |
| | | | | | | | | | E/W E/W | Depart | ure: ure: | | FL FL |
| Lambert X- | X: 1,421 | ,904.830' | | | X: | | | | X: | | | | |
| Y coordinates | | | | | | | | | X: X: | | | | |
| | Y: 105,3 | 81.6' | | | Y: | | | | Y: | | | | |
| | | | | | | | | | Y: V· | | | | |
| Latitude/ | Latitude | 28°56'38.0' | 77" | | Latitude | | | | Latitude | | | | |
| Longitude | | | | | | | | | | Latitude Latitude | | | |
| | Longitud | e -93°08'26 | 5.082" | | Longitude | | | | Longitude | | | | |
| | | | | | | | | | Longitude | | | | |
| Water Depth (F | eet): 77' | | | | MD (Feet): TVD (Feet): | | | | MD | (Feet): | | TVE | (Feet): |
| Anchor Radius | (if applica | ble) in feet [.] | N/A | | | 1 | | | MD MD | (Feet): (Feet): | | TVE |) (Feet):) (Feet): |
| | (in apprice | | | | | | | | | ()- | | | <u> </u> |
| Anchor Loc | ations f | or Drillin | g Rig or (| Construc | tion B | Barge (If anch | or radius supplied | above, | not n | ecessai | :y) | | _ |
| Anchor Name or No. | Area | Block | X Coord | inate | | Y Coordinat | e | Leng | th of A | Anchor | Chai | in on Se | eafloor |
| | | | X = | X = | | Y = | | | | | | | |
| | | | X = | | | Y = | | | | | | | |
| | | | X = | | | Y = | | | | | | | |
| | | _ | X = | | | Y = | | | | | | | |
| | _ | _ | X = | | | Y = | | | | | | | |
| | - | | X = | | | Y = | | | | | | | |
| | | | X = | | | Y = | | | | | | | |







| PSL #B1ST LAT: 28* 56' 38.077" N LONG: -93* 08' 26.082" W X = 1,421,683.381 Y = 1,195,659.439 937.55' FWL of WC 265 | Offshore Lousiana West Cameron 265 Bathymetry Map Proprietary Location #B1ST |
|--|---|
| 8008.82' FNL of WC 265 0 1000' 2000' 3000' 4000' | ENERGY VENTURES |

Atlachment A-7

SECTION B GENERAL INFORMATION

A. APPLICATIONS AND PERMITS

| Application/Permit | Issuing Agency | Status |
|---------------------|----------------|---------|
| APD | BSEE | Pending |
| Surface Commingling | BSEE | Pending |
| | | |

B. DRILLING FLUIDS

According to NTL 2008-G04, drilling fluid information is not required.

C. PRODUCTION

| Туре | Average Production Rate | Peak Production Rate | Life of Reservoir |
|------|----------------------------|-------------------------|----------------------|
| | Proprietary Data | | |
| | | | |

D. OIL CHARACTERISTICS

According to NTL 2008-G04, oil characteristics information is not required.

E. NEW OR UNUSUAL TECHNOLOGY

EnVen does not propose to use new techniques or unusual technology to carry out these proposed development activities; however, the best available and safest technologies (BAST) as referenced in Title 30 CFR 250 will be incorporated as standard operational procedures.

F. BONDING STATEMENT

The bond requirements for the activities and facilities proposed in this DOCD are satisfied by a \$3,000,000.00 areawide bond, furnished and maintained according to 30 CFR 256, subpart I; NTL No. 2000-G16, "Guidelines for General Lease Surety Bonds;" and additional security under National NTL No. 2016-N01, "Requiring Additional Security" to be effective September 12, 2016.

G. OIL SPILL FINANCIAL RESPONSIBILITY (OSFR)

EnVen (BOEM company number 03026) has demonstrated oil spill financial responsibility for the facilities proposed in this DOCD according to 30 CFR Part 253; and NTL No. 2008-N05, "Guidelines for Oil Spill Financial Responsibility for Covered Facilities".

H. DEEPWATER WELL CONTROL STATEMENT

According to NTL 2008-G04, a deepwater well control statement is not required.

I. SUSPENSION OF PRODUCTION

A suspension of production (SOP) has been submitted and is currently under review by BSEE for Lease OCS-G 32112, West Cameron Block 265. EnVen is requesting SOP approval through August 31, 2019.

J. BLOWOUT SCENARIO

Estimated flow rate: 12,910 BOPD Maximum duration of blowout: 40 days Total Volume: 516,400 BOPD

In the event of an uncontrolled flow of hydrocarbons from the wellbore, the Oil Spill Response Plan (OSRP) would be activated. Enven would immediately bring in the most qualified and experienced personnel in order to assist in the control of the blowout/spill. Enven has Cudd Pressure Control, Boot & Coots, and Wild Well Control identified in the OSRP.

Three blowout scenarios will be described below:

Blowout Scenario I is most likely, and is one that will take care of itself in 24 hours without any intervention. Scenario I will assume that the rig, BOPs and wellhead equipment are not damaged beyond repair and the well can be intervened after the well bridges over.

Blowout scenario II will assume that the rig is still on location and capable of supporting a top kill or the replacement of the BOP Stack.

Scenario III will assume that all available MODU's are under contract, another Operator would have to make their well safe, suspend their contract with the Contractor, allow Enven to sign a contract, mob the rig to Enven's location and drill a relief well. These three cases should represent the quickest and simplest solution to the longest and most difficult solution to the problem. Current availability of equipment to enact both well intervention scenarios will be identified.

Blowout Scenario I

Assuming an uncontrolled flow situation, the MODU is intact and not sufficiently damaged, and the well bridges over within a 24 hour period.

Duration:

• 24 hours

Probability of the well bridging over is very high.

Wells in the GoM that have natural completions are typically produced with a sand face draw down of 1,000 psi or less. Depleting sandstone reservoirs in excess of 1,000 psi differential will dramatically increases the chances of sanding up the wellbore. The methodology of using absolute open flow (AOF) of the last casing string set will put maximum drawdown on the sandface and fail the rock rapidly causing a bridge to be formed.

Blowout Scenario II

Assuming an uncontrolled flow situation, the MODU is intact and not sufficiently damaged, wellbore intervention would be performed from the MODU, or a vessel/barge mobilized nearby. It is assumed that the BOPs are compromised, that the rig has not caught on fire and is capable of supporting well control efforts with the assistance of a support vessel. As an example, the flow could be controlled from either a "top kill" method or from removal of the damaged surface BOP stack or wellhead and subsequent replacement of the stack and the wellbore shut in.

Duration:

- 2 days to assess the situation and condition of the well.
- 2 days to mobilize and RU equipment
- 6 days to control well
- 10 days Total

Blowout Scenario III

Assuming an uncontrolled flow situation, where the MODU and/or the wellbore is irreparably damaged during a blowout scenario, a relief well would have to be drilled. It is assumed that a suitable rig is not currently available due to the workload from any of the contractors working in the GoM. It assumes that a another Operator will make their well safe and release the rig they have under contract to Enven for the use of drilling the relief well.

In the case of an uncontrolled flow of hydrocarbons, Enven will simultaneously pursue multiple wellbore intervention methods in an attempt to mitigate and terminate the spill until the wellbore is brought under control.

Duration:

- 2 days to assess the situation and condition of the well.
- 10 days for Operator to suspend current operations
- 2 days to mobilize Rig and equipment

- 26 days to drill relief well
- 40 days total

Rig availability:

- Enven has not currently contracted a rig to drill the prospect
- There are 10 rigs currently working in the GoM capable of drilling a relief well:
 - Enterprise 3 rigs
 - o Ensco 68 3 rigs
 - WFD 2 rigs
 - Rowan 2 rigs

Rig package constraints:

- Water depth is 81' at the location
- Relief well depth within the capability of all jackups working in GoM
- Relief well would be drilled from an open water location
- Use of mat or independent leg rigs is possible use for relief well
- Use of cantilever rigs is possible use for relief well
- Use of a platform rig for a relief well is not an option.

SECTION C GEOLOGICAL AND GEOPHYSICAL INFORMATION

A. GEOLOGICAL DESCRIPTION

Proprietary Data

B. STRUCTURE CONTOUR MAP

Proprietary Data

C. INTERPRETED SEISMIC LINE(S)

Proprietary Data

D. GEOLOGICAL STRUCTURE CROSS-SECTIONS

Proprietary Data

E. SHALLOW HAZARDS REPORT

A shallow hazards survey was conducted over West Cameron Block 265.

The proposed operations will be conducted from a previously approved surface location as provided for in Plan Control No. N-9377; therefore, a shallow hazards report is not being provided.

F. SHALLOW HAZARDS ASSESSMENT

The proposed operations will be conducted from a BOEM previously approved surface location in Plan Control No. N-9377; therefore, a shallow hazards assessment is not being provided.

G. HIGH-RESOLUTION SEISMIC LINES

The proposed operations will be conducted from a previously approved surface location in Plan Control No. N-9377; therefore annotated high-resolution survey lines are not being submitted.

H. STRATIGRAPHIC COLUMN

Proprietary Data

I. TIME VS DEPTH TABLES

Sufficient well control data for the target areas proposed in this DOCD exists; therefore, seismic time versus depth tables for the proposed well locations are not required.

SECTION D HYDROGEN SULFIDE INFORMATION

A. CONCENTRATION

EnVen does not anticipate encountering any H_2S during the proposed operations.

B. CLASSIFICATION

In accordance with Title 30 CFR 250.490(c), EnVen requests that the area of the proposed activities in West Cameron Block 265 be classified by the BOEM as H_2S absent.

C. H2S CONTINGENCY PLAN

According to NTL 2008-G04, an H2S Contingency Plan is not required.

D. MODELING REPORT

According to NTL 2008-G04, an H2S modeling report is not required.

SECTION E MINERAL RESOURCE CONSERVATION INFORMATION

(A) TECHNOLOGY & RESERVOIR ENGINEERING PRACTICES & PROCEDURES

The WC 265 Field has produced the D-Series, E-Series, F-Series, and G-Series Sands, and petro-physical and reservoir performance data is available for the produced wells. A development opportunity has been identified in the D-11 Sand in WC Block 266 in addition to the previously existing D-1, D-2, and D-3 Gas Sands in WC 265 which are under SOP. The D-11 target is a previously unproduced reservoir and could lead to offset take points. The proposed well is designed for efficient development of all the above identified D-Series opportunities. Because of the availability of area bottom-hole pressure, fluid composition, log response, and reservoir performance data, the target reservoirs can be developed and managed for optimum rates and recoveries. EnVen will continue to add to this database of information as we operate the field and plan for new development.

(B) TECHNOLOGY AND RECOVERY PRACTICES AND PROCEDURES

EnVen will evaluate opportunities to enable maximum recovery of oil and gas prior to field economic limits being reached. There may be opportunities for optimization and de-bottlenecking of surface facilities. Additionally, opportunities may exist to manage pressure drawdown and optimize oil production rates.

(C) RESERVOIR DEVELOPMENT

The proposed well will be directional and will penetrate the D-1, D-2, D-3, and D-11 Sands. The well targets the D-11 Sand in a fault block that has not been produced. It is expected that a frac-pack completion will be utilized, and there may be opportunities to include selective alternates for more capital-efficient development of the D-Series Sands. In addition to efficient reservoir management based on observed rates and pressures, EnVen expects to be able to design a completion optimized for capital economy, durability, production rate, and pressure management.

SECTION F BIOLOGICAL, PHYSICAL & SOCIOECONOMIC INFORMATION

A. CHEMOSYNTHETIC COMMUNITIES REPORT

This DOCD does not propose activities that could disturb seafloor areas in water depths of 300 meters (984 feet) or greater; therefore, chemosynthetic information is not required.

B. TOPOGRAPHIC FEATURES MAP

Activities proposed in this DOCD do not fall within 305 meters (1000 feet) of the "no activity zone", therefore no map is required.

C. TOPOGRAPHIC FEATURES STATEMENT (SHUNTING)

All activities proposed under this DOCD will be conducted outside all Topographic Feature Protective Zones, therefore shunting of drill cuttings and drilling fluids is not required.

D. LIVE BOTTOMS (PINNACLE TREND) MAP

West Cameron Block 265 is not located within 200 feet of any pinnacle trend feature with vertical relief equal to or greater than 8 feet; therefore, live bottom information is not required.

E. LIVE BOTTOMS (LOW RELIEF) MAP

West Cameron Block 265 is not located within 200 feet of any pinnacle trend feature with vertical relief equal to or greater than 8 feet; therefore, live bottom (low relief) maps are not required.

F. POTENTIALLY SENSITIVE BIOLOGICAL FEATURES

West Cameron Block 265 is not located within 61 meters (200 feet) of potentially sensitive biological features; therefore, biologically sensitive area maps are not required.

G. REMOTELY OPERATED VEHICLE (ROV) SURVEYS

These proposed operations do not take place in deep water; therefore an ROV survey is not required.

H. THREATENED AND ENDANGERED SPECIES, CRITICAL HABITAT, AND MARINE MAMMAL INFORMATION

Under Section 7 of the Endangered Species Act (ESA) all federal agencies must ensure that any actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of a listed species, or destroy or adversely modify its designated critical habitat.

In accordance with the 30 CFR 250, Subpart B, effective May 14, 2007, and further outlined in Notice to Lessees (NTL) 2008-G04, lessees/operators are

required to address site-specific information on the presence of federally listed threatened or endangered species and critical habitat designated under the ESA and marine mammals protected under the Marine Mammal Protection Act (MMPA) in the area of proposes activities under this plan.

Currently, there are no designated critical habitats for the listed species in the Gulf of Mexico Outer Continental Shelf; however, it is possible that one or more of these species could be seen in the area of our operations.

NOAA Fisheries currently lists the Sperm Whale, West Indian Manatee, Leatherback Turtle, Hawksbill Turtle and the Kemp's Ridley Turtle as endangered and the Loggerhead Turtle, Green Turtle and Gulf Sturgeon as threatened.

I. ARCHAEOLOGICAL REPORT

Review of the data obtained during the shallow hazard study does not indicate the presence of any historic period shipwrecks.

J. AIR AND WATER QUALITY INFORMATION

According to NTL 2008-G04, Air and Water Quality Information is not required.

K. SOCIOECONOMIC INFORMATION

According to NTL 2008-G04, Socioeconomic Information is not required.

SECTION G

WASTES AND DISCHARGES INFORMATION

A. PROJECTED GENERATED WASTES

Projected Generated Waste information is not required in this DOCD, per NTL 2008-G04.

B. PROJECTED OCEAN DISCHARGES

Discharge information is not required in this DOCD, per NTL 2008-G04.

C. MODELING REPORT

According to NTL 2008-G04, a modeling report is not required for these operations.

SECTION H AIR EMISSIONS INFORMATION

EMISSIONS WORKSHEETS AND SCREENING QUESTIONS

| Screen Procedures for DOCD's | Yes | No |
|---|-----|----|
| Is any calculated Complex Total (CT) Emission amount (tons) associated with your proposed development activities more than 90% of the amounts calculated using the following formulas: $CT = 3400D^{2/3}$ for CO, and $CT = 33.3D$ for the other air pollutants (where D = distance to shore in miles)? | | X |
| Do your emission calculations include any emission reduction measures or modified emission factors? | | Х |
| Does or will the facility complex associated with your proposed development and production activities process production from eight or more wells? | | Х |
| Do you expect to encounter H ₂ S at concentrations greater than 20 parts per million (ppm)? | | Х |
| Do you propose to flare or vent natural gas in excess or criteria set for the under 250.1105(a)(2) and (3)? | | Х |
| Do you propose to burn produced hydrocarbon liquids? | | Х |
| Are your proposed development and production activities located within 25 miles (40 kilometers) from shore? | | Х |
| Are your proposed development and production activities located within 124 miles (200 kilometers) of the Breton Wilderness Area? | | Х |

Plan Emission and Complex Total Emission amounts were calculated using the methodology, emission factors and worksheets in Form BOEM-139 for DOCD's.

There is an existing facility co-located with the currently proposed activities, therefore the Complex Total Emissions are not the same as the Plan Emissions and both calculations are provided in the table below.

Enclosed as **Attachment H-1** are the emissions worksheets prepared in accordance with 30 CFR 550.303(d).

The air emission worksheets were prepared by:

Cheryl Powell Regulatory Manager (713) 335-7041 cpowell@enven.com

DOCD AIR QUALITY SCREENING CHECKLIST

| COMPANY | EnVen Energy Ventures, LLC |
|-----------------|---|
| AREA | West Cameron |
| BLOCK | 265 |
| LEASE | G 32112 |
| PLATFORM | В |
| WELL | B-1ST |
| COMPANY CONTACT | Cheryl Powell |
| TELEPHONE NO. | 713-335-7041 |
| REMARKS | Drill, complete & produce Well No. B-1 ST |
| | PLAN EMISSIONS |

| LEASE TERI | M PIPELINE CO | DNSTRUCTION INFORMATION: |
|------------|------------------------|-----------------------------------|
| YEAR | NUMBER OF PIPELINES | TOTAL NUMBER OF CONSTRUCTION DAYS |
| 1999 | | |
| 2000 | | |
| 2001 | | |
| 2002 | | |
| 2003 | | |
| 2004 | | |
| 2005 | | |
| 2006 | | |
| 2007 | | |
| 2008 | | |
| 2009 | | |

Form MMS-139 (August 2003) Page 1 of 8 Allachment H-1

AIR EMISSION CUMPUTATION FACTORS

| Fuel Usage Conversion Factors | Natural Gas Turbines | | Natural Gas E | Natural Gas Engines | | p. Engine | REF. | DATE |
|-------------------------------|----------------------|-------|---------------|---------------------|-----------|-----------|------------|-------------|
| | SCF/hp-hr | 9.524 | SCF/hp-hr | 7.143 | GAL/hp-hr | 0.0483 | AP42 3.2-1 | 4/76 & 8/84 |

| Equipment/Emission Factors | units | PM | SOx | NOx | VOC | CO | REF. | DATE |
|----------------------------|--------------|-------|---------|------|--------|-------|-----------------------|-------|
| | | | | | | | | |
| NG Turbines | gms/hp-hr | | 0.00247 | 1.3 | 0.01 | 0.83 | AP42 3.2-1& 3.1-1 | 10/96 |
| NG 2-cycle lean | gms/hp-hr | | 0.00185 | 10.9 | 0.43 | 1.5 | AP42 3.2-1 | 10/96 |
| NG 4-cycle lean | gms/hp-hr | | 0.00185 | 11.8 | 0.72 | 1.6 | AP42 3.2-1 | 10/96 |
| NG 4-cycle rich | gms/hp-hr | | 0.00185 | 10 | 0.14 | 8.6 | AP42 3.2-1 | 10/96 |
| | | | | | | | | |
| Diesel Recip. < 600 hp. | gms/hp-hr | 1 | 1.468 | 14 | 1.12 | 3.03 | AP42 3.3-1 | 10/96 |
| Diesel Recip. > 600 hp. | gms/hp-hr | 0.32 | 1.468 | 11 | 0.33 | 2.4 | AP42 3.4-1 | 10/96 |
| Diesel Boiler | lbs/bbl | 0.084 | 2.42 | 0.84 | 0.008 | 0.21 | AP42 1.3-12,14 | 9/98 |
| | | | | | | | | |
| NG Heaters/Boilers/Burners | lbs/mmscf | 7.6 | 0.593 | 100 | 5.5 | 84 | P42 1.4-1, 14-2, & 14 | 7/98 |
| NG Flares | lbs/mmscf | | 0.593 | 71.4 | 60.3 | 388.5 | AP42 11.5-1 | 9/91 |
| Liquid Flaring | lbs/bbl | 0.42 | 6.83 | 2 | 0.01 | 0.21 | AP42 1.3-1 & 1.3-3 | 9/98 |
| Tank Vapors | lbs/bbl | | | | 0.03 | | E&P Forum | 1/93 |
| Fugitives | lbs/hr/comp. | | | | 0.0005 | | API Study | 12/93 |
| Glycol Dehydrator Vent | lbs/mmscf | | | | 6.6 | | La. DEQ | 1991 |
| Gas Venting | lbs/scf | | | | 0.0034 | | | |

| Sulfur Content Source | Value | Units |
|-------------------------------|-------|----------|
| Fuel Gas | 3.33 | ppm |
| Diesel Fuel | 0.4 | % weight |
| Produced Gas(Flares) | 3.33 | ppm |
| Produced Oil (Liquid Flaring) | 1 | % weight |

| COMPANY | AREA | BLOCK | LEASE | PLATFORM | WELL | | CONTACT PHONE REMARKS | | | REMARKS | | | | | | |
|------------------------|------------------------------------|---|-----------------------------|--|----------------|------|-----------------------|---------------|------------|--------------|--------|---------|---------|------------|---------|----------|
| EnVen Energy Ventures, | West Cameron | 265 | G 32112 | В | B-1ST | | | Cheryl Powell | | 713-335-7041 | #REF! | | | | | |
| OPERATIONS | EQUIPMENT | RATING | MAX. FUEL | ACT. FUEL | RUN | TIME | | MAXIMUN | I POUNDS P | ER HOUR | | | ES | TIMATED TO | NS | |
| | Diesel Engines | HP | GAL/HR | GAL/D | | | | | | | | | | | | |
| | Nat. Gas Engines | HP | SCF/HR | SCF/D | | | | | | | | | | | | |
| | Burners | MMBTU/HR | SCF/HR | SCF/D | HR/D | DAYS | PM | SOx | NOx | VOC | CO | PM | SOx | NOx | voc | CO |
| DRILLING | PRIME MOVER>600hp diesel | 16400 | 792.12 | 19010.88 | 24 | 60 | 11.56 | 53.03 | 397.36 | 11.92 | 86.70 | 8.32 | 38.18 | 286.10 | 8.58 | 62.42 |
| | VESSELS>600hp diesel(crew) | 2065 | 99.7395 | 2393.75 | 6 | 26 | 1.46 | 6.68 | 50.03 | 1.50 | 10.92 | 0.11 | 0.52 | 3.86 | 0.12 | 0.84 |
| | VESSELS>600hp diesel(supply) | 2065 | 99.7395 | 2393.75 | 10 | 26 | 1.46 | 6.68 | 50.03 | 1.50 | 10.92 | 0.19 | 0.86 | 6.43 | 0.19 | 1.40 |
| | | | | | | | | | | | | | | | | |
| PIPELINE | PIPELINE LAY BARGE diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| INSTALLATION | SUPPORT VESSEL diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | PIPELINE BURY BARGE diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | SUPPORT VESSEL diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(crew) | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(supply) | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | | | | | | | |
| FACILITY | DERRICK BARGE diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| INSTALLATION | MATERIAL TUG diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(crew) | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(supply) | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | - | | | | L | | | | | | | |
| PRODUCTION | RECIP.<600hp diesel - Crane | 120 | 5.796 | 139.10 | 2 | 6 | 0.26 | 0.39 | 3.70 | 0.30 | 0.80 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 |
| | RECIP.<600hp diesel - Generator | 300 | 14.49 | 347.76 | 6 | 9 | 0.66 | 0.97 | 9.25 | 0.74 | 2.00 | 0.02 | 0.03 | 0.25 | 0.02 | 0.05 |
| | RECIP.>600hp diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | SUPPORT VESSEL diesel | 2065 | 99.7395 | 2393.75 | 10 | 39 | 1.46 | 6.68 | 50.03 | 1.50 | 10.92 | 0.28 | 1.29 | 9.65 | 0.29 | 2.11 |
| | TURBINE nat gas | 0 | 0 | 0.00 | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 |
| | RECIP.2 cycle lean nat gas | 0 | 0 | 0.00 | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 |
| | RECIP.4 cycle lean nat gas - gener | 1250 | 8928.75 | 214290.00 | 24 | 90 | l | 0.01 | 32.49 | 1.98 | 4.41 | | 0.01 | 35.09 | 2.14 | 4.76 |
| | RECIP.4 cycle rich nat gas | 0 | 0 | 0.00 | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 |
| | BURNER nat gas | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | MISC. | BPD | SCF/HR | COUNT | | | | | | ····· | | | r | | | |
| | TANK- | 0 | and the state of the second | | 0 | 0 | | | | 0.00 | | | | | 0.00 | |
| | FLARE- | Sale States | 0 | and the state | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 |
| | PROCESS VENT- | 1.72 4 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. | 0 | Date Art State | 0 | 0 | | | l | 0.00 | l | | | | 0.00 | |
| | FUGITIVES- | 10 C 10 C | ANT BESS SA | 0.0 | all the states | 0 | | | 1 | 0.00 | 1 | | | | 0.00 | |
| | GLYCOL STILL VENT- | and the street | 0 | Margare Para | 0 | 0 | | | L | 0.00 | | | L | | 0.00 | |
| DRILLING | OIL BURN | 0 | fround with | | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| WELL TEST | GAS FLARE | Sector States | 0 | 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1 | 0 | 0 | J | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 |
| | | - | | | | | | | | | 100.00 | | 40.00 | 0.41.40 | 44.04 | 71 50 |
| 2019 | YEAR TOTAL | ł | 1 | | | l | 16.85 | 74.42 | 592.90 | 19.44 | 126.65 | 8.92 | 40.88 | 341.40 | 11.34 | /1.59 |
| EXEMPTION | DISTANCE FROM LAND IN | | 1 | | | l | И | I | L | L | | | | | | |
| CALCULATION | MILES | | | | | | | | | | | 1864.80 | 1864.80 | 1864.80 | 1864.80 | 49766.56 |
| | 56.0 | 1 | | | | | | | | | | 1 | | [| | |

| COMPANY | AREA | BLOCK | LEASE | PLATFORM | WELL | | | CONTACT | | PHONE | REMARKS | | | | | |
|--------------------------|--|--|--------------|----------------|-----------------------|------|------|---------------|------------|--------------|---------|---------|---------|-----------|---------|----------|
| EnVen Energy Ventures, | West Cameron | 265 | G 32112 | В | B-1ST | | | Cheryl Powell | | 713-335-7041 | #REF! | | | | | |
| OPERATIONS | EQUIPMENT | RATING | MAX. FUEL | ACT. FUEL | RUN | TIME | | MAXIMUN | I POUNDS F | PER HOUR | | | EST | IMATED TO | ٧S | |
| | Diesel Engines | HP | GAL/HR | GAL/D | | | | | | | | | | | | |
| | Nat. Gas Engines | HP | SCF/HR | SCF/D | | | | | | | | | | | | |
| | Burners | MMBTU/HR | SCF/HR | SCF/D | HR/D | DAYS | PM | SOx | NOx | voc | co | PM | SOx | NOx | VOC | co |
| DRILLING | PRIME MOVER>600hp diesel | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1 | PRIME MOVER>600hp diesel | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|) | PRIME MOVER>600hp diesel | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | PRIME MOVER>600hp diesel | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | BURNER diesel | 0 | | | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | AUXILIARY EQUIP<600hp diesel | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(crew) | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(supply) | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(tugs) | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | | | | | | | |
| PIPELINE | PIPELINE LAY BARGE diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| INSTALLATION | SUPPORT VESSEL diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | PIPELINE BURY BARGE diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | SUPPORT VESSEL diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(crew) | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(supply) | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | DEDDIOK RADOE diasal | | | 0.00 | | | | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | MATERIAL THE dises | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| INSTALLATION | MATERIAL TUG diesel | 0 | 0 | 0.00 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(crew) | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | vE33EL3>6001p diesei(supply) | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| PRODUCTION | RECIP.<600hp diesel - Crane | 120 | 5.796 | 139.10 | 2 | 24 | 0.26 | 0.39 | 3,70 | 0.30 | 0.80 | 0.01 | 0.01 | 0.09 | 0.01 | 0.02 |
| | RECIP.<600hp diesel - Generator | 300 | 14.49 | 347.76 | 6 | 36 | 0.66 | 0.97 | 9.25 | 0.74 | 2.00 | 0.07 | 0.10 | 1.00 | 0.08 | 0.22 |
| | RECIP.>600hp diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | SUPPORT VESSEL diesel | 2065 | 99.7395 | 2393.75 | 10 | 156 | 1.46 | 6.68 | 50.03 | 1.50 | 10.92 | 1.14 | 5.22 | 39.13 | 1.17 | 8.54 |
| | TURBINE nat gas | 0 | 0 | 0.00 | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 |
| | RECIP.2 cycle lean nat gas | 0 | 0 | 0.00 | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 |
| | RECIP.4 cycle lean nat gas - generator | 1250 | 8928.75 | 214290.00 | 24 | 365 | | 0.01 | 32.49 | 1.98 | 4.41 | | 0.02 | 142.30 | 8.68 | 19.30 |
| | RECIP.4 cycle rich nat gas | 0 | 0 | 0.00 | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 |
| | BURNER nat gas | 0 | 0.00 | 0.00 |] 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | TANK- | 0 | ALCONT OF MO | Althe St. St. | 0 | 0 | | | | 0.00 | | | | | 0.00 | |
| | FLARE- | a state of | 0 | | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 |
| | PROCESS VENT- | 1. 1. 1. 1. 1. | 0 | W. S. Barry in | 0 | 0 | 1 | 1 | 1 | 0.00 | { | | | | 0.00 | |
| | FUGITIVES- | Constant Sec. 54 | Server La Co | 0.0 | - try war in a second | 0 | | 1 | | 0.00 | | | | | 0.00 | |
| | GLYCOL STILL VENT- | 1 | 0 | 1 | 0 | 0 | l | | | 0.00 | | | | | 0.00 | |
| DRILLING | OIL BURN | 0 | under Survey | No. | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| WELL TEST | GAS FLARE | 1944 - 1949 - | 0 | 1. S. Y. I | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | L | 0.00 | 0.00 | 0.00 | 0.00 |
| 2020-2020 | | 4 | | | | | 2.38 | 8.04 | 95.47 | 4.52 | 18 12 | 1 22 | 5 36 | 182.52 | 9 94 | 28.07 |
| 2020-2030 | | 1 | | ļ | l | | 2.30 | 0.04 | 50.4/ | 4.52 | 10.12 | 1.22 | 3.00 | 102.52 | 3.34 | 20.07 |
| EXEMPTION CALCULATION | DISTANCE FROM LAND IN MILES | | L | | | | и | | | | | 1864.80 | 1864.80 | 1864.80 | 1864.80 | 49766.56 |
| | 56.0 | | | | | | | | | | | | | | | |

AIR EMISSION CALCULATIONS

| COMPANY | AREA | BLOCK | LEASE | PLATFORM | WELL | | | |
|----------------|--------------|---------|-----------|----------|----------|--|--|--|
| EnVen Energy V | West Cameron | 265 | G 32112 | В | B-1ST | | | |
| Year | | Emitted | Substance | | | | | |
| | РМ | SOx | NOx | voc | со | | | |
| 2019 | 8.92 | 40.88 | 341.40 | 11.34 | 71.59 | | | |
| 2020 | 1.22 | 5.36 | 182.52 | 9.94 | 28.07 | | | |
| 2021 | 1.22 | 5.36 | 182.52 | 9.94 | 28.07 | | | |
| 2022 | 1.22 | 5.36 | 182.52 | 9.94 | 28.07 | | | |
| 2023 | 1.22 | 5.36 | 182.52 | 9.94 | 28.07 | | | |
| 2024 | 1.22 | 5.36 | 182.52 | 9.94 | 28.07 | | | |
| 2025 | 1.22 | 5.36 | 182.52 | 9.94 | 28.07 | | | |
| 2026 | 1.22 | 5.36 | 182.52 | 9.94 | 28.07 | | | |
| 2027 | 1.22 | 5.36 | 182.52 | 9.94 | 28.07 | | | |
| 2028 | 1.22 | 5.36 | 182.52 | 9.94 | 28.07 | | | |
| 2029 | 1.22 | 5.36 | 182.52 | 9.94 | 28.07 | | | |
| 2030 | 1.22 | 5.36 | 182.52 | 9.94 | 28.07 | | | |
| Allowable | 1864.80 | 1864.80 | 1864.80 | 1864.80 | 49766.56 | | | |

DOCD AIR QUALITY SCREENING CHECKLIST

| COMPANY | EnVen Energy Ventures, LLC |
|-----------------|---|
| AREA | West Cameron |
| BLOCK | 265 |
| LEASE | G 32112 |
| PLATFORM | В |
| WELL | B-1ST |
| COMPANY CONTACT | Cheryl Powell |
| TELEPHONE NO. | 713-335-7041 |
| REMARKS | Drill, complete & produce Well No. B-1 ST |
| | COMPLEX TOTAL EMISSIONS |

| LEASE TER | M PIPELINE CO | DNSTRUCTION INFORMATION: |
|-----------|------------------------|-----------------------------------|
| YEAR | NUMBER OF PIPELINES | TOTAL NUMBER OF CONSTRUCTION DAYS |
| 1999 | | |
| 2000 | | |
| 2001 | | |
| 2002 | | |
| 2003 | | |
| 2004 | | |
| 2005 | | |
| 2006 | | |
| 2007 | | |
| 2008 | | |
| 2009 | | |

Form MMS-139 (August 2003) Page 1 of 8

AIR EMISSION CUMPUTATION FACTORS

| Fuel Usage Conversion Factors | Natural Gas Turbines | | Natural Gas I | Engines | Diesel Reci | p. Engine | REF. | DATE |
|-------------------------------|----------------------|-------|---------------|---------|-------------|-----------|------------|-------------|
| | SCF/hp-hr | 9.524 | SCF/hp-hr | 7.143 | GAL/hp-hr | 0.0483 | AP42 3.2-1 | 4/76 & 8/84 |

| Equipment/Emission Factors | units | PM | SOx | NOx | VOC | CO | REF. | DATE |
|----------------------------|--------------|-------|---------|------|--------|-------|-----------------------|-------|
| | | | | | | | | |
| NG Turbines | gms/hp-hr | | 0.00247 | 1.3 | 0.01 | 0.83 | AP42 3.2-1& 3.1-1 | 10/96 |
| NG 2-cycle lean | gms/hp-hr | | 0.00185 | 10.9 | 0.43 | 1.5 | AP42 3.2-1 | 10/96 |
| NG 4-cycle lean | gms/hp-hr | | 0.00185 | 11.8 | 0.72 | 1.6 | AP42 3.2-1 | 10/96 |
| NG 4-cycle rich | gms/hp-hr | | 0.00185 | 10 | 0.14 | 8.6 | AP42 3.2-1 | 10/96 |
| | | | | | | | | |
| Diesel Recip. < 600 hp. | gms/hp-hr | 1 | 1.468 | 14 | 1.12 | 3.03 | AP42 3.3-1 | 10/96 |
| Diesel Recip. > 600 hp. | gms/hp-hr | 0.32 | 1.468 | 11 | 0.33 | 2.4 | AP42 3.4-1 | 10/96 |
| Diesel Boiler | lbs/bbl | 0.084 | 2.42 | 0.84 | 0.008 | 0.21 | AP42 1.3-12,14 | 9/98 |
| | | | | | | | | |
| NG Heaters/Boilers/Burners | lbs/mmscf | 7.6 | 0.593 | 100 | 5.5 | 84 | P42 1.4-1, 14-2, & 14 | 7/98 |
| NG Flares | lbs/mmscf | | 0.593 | 71.4 | 60.3 | 388.5 | AP42 11.5-1 | 9/91 |
| Liquid Flaring | lbs/bbl | 0.42 | 6.83 | 2 | 0.01 | 0.21 | AP42 1.3-1 & 1.3-3 | 9/98 |
| Tank Vapors | lbs/bbl | | | | 0.03 | | E&P Forum | 1/93 |
| Fugitives | lbs/hr/comp. | | | | 0.0005 | | API Study | 12/93 |
| Glycol Dehydrator Vent | lbs/mmscf | | | | 6.6 | | La. DEQ | 1991 |
| Gas Venting | lbs/scf | | | | 0.0034 | | | |

| Sulfur Content Source | Value | Units |
|-------------------------------|-------|----------|
| Fuel Gas | 3.33 | ppm |
| Diesel Fuel | 0.4 | % weight |
| Produced Gas(Flares) | 3.33 | ppm |
| Produced Oil (Liquid Flaring) | 1 | % weight |

| COMPANY | AREA | BLOCK | LEASE | PLATFORM | WELL | | CONTACT PHONE REMARKS | | | | | | | | | |
|------------------------|------------------------------------|--------------------------|----------------------|-------------------|-------------|------|-----------------------|---------------|----------|--------------|----------|---------|---------|------------|---------|----------|
| EnVen Energy Ventures, | West Cameron | 265 | G 32112 | ß | B-1ST | | | Cheryl Powell | | 713-335-7041 | #REF! | | | | | |
| OPERATIONS | EQUIPMENT | RATING | MAX. FUEL | ACT. FUEL | RUN | TIME | | MAXIMUN | POUNDS P | ER HOUR | | | ES | TIMATED TO | NS | |
| | Diesel Engines | HP | GAL/HR | GAL/D | | | | | | | | | | | | |
| | Nat. Gas Engines | HP | SCF/HR | SCF/D | | | | | | | | | | | | |
| | Burners | MMBTU/HR | SCF/HR | SCF/D | HR/D | DAYS | PM | SOx | NOx | VOC | CO | PM | SOx | NOx | VOC | CO |
| DRILLING | PRIME MOVER>600hp diesel | 16400 | 792.12 | 19010.88 | 24 | 60 | 11.56 | 53.03 | 397.36 | 11.92 | 86.70 | 8.32 | 38.18 | 286.10 | 8.58 | 62.42 |
| | VESSELS>600hp diesel(crew) | 2065 | 99.7395 | 2393.75 | 6 | 26 | 1.46 | 6.68 | 50.03 | 1.50 | 10.92 | 0.11 | 0.52 | 3.86 | 0.12 | 0.84 |
| | VESSELS>600hp diesel(supply) | 2065 | 99.7395 | 2393.75 | 10 | 26 | 1.46 | 6.68 | 50.03 | 1.50 | 10.92 | 0.19 | 0.86 | 6.43 | 0.19 | 1.40 |
| PIPELINE | PIPELINE LAY BARGE diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| INSTALLATION | SUPPORT VESSEL diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | PIPELINE BURY BARGE diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1 | SUPPORT VESSEL diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(crew) | 0 | 0 | 0.00 | | 0 | 0.00 | 0.00 | 0.00 | 0,00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(supply) | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| FACILITY | DERRICK BARGE diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| INSTALLATION | MATERIAL TUG diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(crew) | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(supply) | 0 | 0 | 0.00 | o | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | | | | | | | |
| PRODUCTION | RECIP.<600hp diesel - Crane | 120 | 5.796 | 139.10 | 2 | 24 | 0.26 | 0.39 | 3.70 | 0.30 | 0.80 | 0.01 | 0.01 | 0.09 | 0.01 | 0.02 |
| | RECIP.<600hp diesel - Generator | 300 | 14.49 | 347.76 | 6 | 36 | 0.66 | 0.97 | 9.25 | 0.74 | 2.00 | 0.07 | 0.10 | 1.00 | 0.08 | 0.22 |
| | RECIP.>600hp diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | SUPPORT VESSEL diesel | 2065 | 99.7395 | 2393.75 | 10 | 156 | 1.46 | 6.68 | 50.03 | 1.50 | 10.92 | 1.14 | 5.22 | 39.13 | 1.17 | 8.54 |
| | TURBINE nat gas | 0 | 0 | 0.00 | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 |
| | RECIP.2 cycle lean nat gas | 0 | 0 | 0.00 | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 |
| | RECIP.4 cycle lean nat gas - gener | 1250 | 8928.75 | 214290.00 | 24 | 365 | | 0.01 | 32.49 | 1,98 | 4.41 | | 0.02 | 142.30 | 8.68 | 19.30 |
| | RECIP.4 cycle rich nat gas | 0 | 0 | 0.00 | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 |
| | BURNER nat gas | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | MISC. | BPD | SCF/HR | COUNT | | | | | | | | | | | | |
| | TANK- | 0 | and they making | i interior | 0 | 0 | | | | 0.00 | | | | | 0,00 | |
| | FLARE- | Second Second | 0 | Wrants 32 | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 |
| | PROCESS VENT- | M. HAATA | 0 | Minne man Odlar | 0 | 0 | | | | 0.00 | | | | | 0.00 | |
| | FUGITIVES- | | Extend washing | 0.0 | all michail | 0 | | | | 0.00 | | | | | 0.00 | |
| | GLYCOL STILL VENT- | and a start of the start | 0 | A STAND | 0 | 0 | | | | 0.00 | | | | | 0.00 | |
| DRILLING | OIL BURN | 0 | A STATE OF THE OWNER | The second second | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| WELL TEST | GAS FLARE | Anter a co | 0 | CAN STREET | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | l | 0.00 | 0.00 | 0.00 | 0.00 |
| 2019 | YEAR TOTAL | 1 | | | | | 16.85 | 74.42 | 592.90 | 19.44 | 126.65 | 9.84 | 44.91 | 478.91 | 18.84 | 92.74 |
| | | <u> </u> | <u> </u> | 1 | | | 1 | 1 | <u> </u> | <u> </u> | <u> </u> | | | ļ | | |
| EXEMPTION | DISTANCE FROM LAND IN | | | | | | | | | | | 1001.00 | 4004.00 | 1001.00 | 1001.00 | 40700 50 |
| CALCULATION | MILES | 4 | | | | | | | | | | 1864.80 | 1864.80 | 1864.80 | 1864.80 | 49766.56 |
| 1 | 56.0 | 1 | | | | | | | | | | JI | | 1 | | |

| COMPANY | AREA | BLOCK | LEASE | PLATFORM | WELL | | CONTACT PHONE REMARKS | | | | | | | | | |
|--|--|---|------------------------------------|--|--|------|----------------------------------|--|-------|----------------|--|---|---------|---------|--|-------------------------------|
| EnVen Energy Ventures, | West Cameron | 265 | G 32112 | B | B-1ST | | Cheryl Powell 713-335-7041 #REF! | | | | | | | | | |
| OPERATIONS | EQUIPMENT | RATING | MAX. FUEL | ACT. FUEL | RUN | TIME | | MAXIMUM POUNDS PER HOUR | | ESTIMATED TONS | | | | | | |
| | Diesel Engines | HP | GAL/HR | GAL/D | | | | | | | | | | | | |
| | Nat. Gas Engines | HP | SCF/HR | SCF/D | | | | | | | | | | | | |
| | Burners | MMBTU/HR | SCF/HR | SCF/D | HR/D | DAYS | PM | SOx | NOx | voc | CO | PM | SOx | NOx | VOC | CO |
| DRILLING | PRIME MOVER>600hp diesel | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | PRIME MOVER>600hp diesel | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | PRIME MOVER>600hp diesel | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | PRIME MOVER>600hp diesel | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | BURNER diesel | 0 | a na menidaraki | A Great Startes | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | AUXILIARY EQUIP<600hp diesel | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(crew) | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(supply) | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(tugs) | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | | | | | | | |
| PIPELINE | PIPELINE LAY BARGE diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| INSTALLATION | SUPPORT VESSEL diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | PIPELINE BURY BARGE diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | SUPPORT VESSEL diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1 | VESSELS>600hp diesel(crew) | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(supply) | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | | | | 0.00 | | | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | | |
| | | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| INSTALLATION | WATERIAL TOG diesel | 0 | 0 | 0.00 | 0 00 | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>600hp diesel(crew) | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | VESSELS>0001p diesei(supply) | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| PRODUCTION | RECIP.<600hp diesel - Crane | 120 | 5.796 | 139.10 | 2 | 24 | 0.26 | 0.39 | 3.70 | 0.30 | 0.80 | 0.01 | 0.01 | 0.09 | 0.01 | 0.02 |
| 1 | RECIP.<600hp diesel - Generator | 300 | 14.49 | 347.76 | 6 | 36 | 0.66 | 0.97 | 9.25 | 0.74 | 2.00 | 0.07 | 0.10 | 1.00 | 0.08 | 0.22 |
| | RECIP.>600hp diesel | 0 | 0 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | SUPPORT VESSEL diesel | 2065 | 99.7395 | 2393.75 | 10 | 156 | 1.46 | 6.68 | 50.03 | 1.50 | 10.92 | 1.14 | 5.22 | 39.13 | 1.17 | 8.54 |
| | TURBINE nat gas | 0 | 0 | 0.00 | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 |
| | RECIP.2 cycle lean nat gas | 0 | 0 | 0.00 | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 |
| | RECIP.4 cycle lean nat gas - generator | 1250 | 8928.75 | 214290.00 | 24 | 365 | | 0.01 | 32.49 | 1.98 | 4.41 | | 0.02 | 142.30 | 8.68 | 19.30 |
| 1 | RECIP.4 cycle rich nat gas | 0 | 0 | 0.00 | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 |
| 1 | BURNER nat gas | 0 | 0.00 | 0.00 | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | TANK- | 0 | A dimension in the | | 0 | 0 | | | | 0.00 | | | | | 0.00 | |
| | FLARE- | | 0 | 1 5- 25 7 . 1 | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 |
| | PROCESS VENT- | | 0 | ST. S. Y. | 0 | 0 | | | | 0.00 | | | | | 0.00 | |
| 1 | FUGITIVES- | A March 1991 | Server Company | 0.0 | Sector . | 0 | l | | | 0.00 | | | | | 0.00 | |
| L | GLYCOL STILL VENT- | Contradication | 0 | 19. Sec. 2. | 0 | 0 | | | | 0.00 | | | | | 0.00 | |
| DRILLING | OILBURN | 0 | - TWANT 164 324 | thin the stre | 0 | 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| WELL TEST | GAS FLARE | A State State | 0 | 1.10.00 | 0 | 0 | | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 |
| 2020.2020 | | - | | | | | 2.20 | 8.04 | 05.47 | 4.52 | 18 12 | 1 22 | 5 36 | 182 52 | 9.94 | 28.07 |
| 2020-2030 | | - | | | | | 2.30 | 0.04 | 90.4/ | 4.52 | 10.12 | 1.22 | 5.50 | 102.32 | 3.34 | 20.07 |
| | DISTANCE FROM LAND IN MILES | 1 | .1 | | 1 | - | B | 1 | £ | <u></u> | | 1864,80 | 1864.80 | 1864.80 | 1864.80 | 49766.56 |
| - CALOULATION | 56.0 | 1 | | | | | | | | | | | | | | |
| And and a second s | | and the second se | and the state of the second second | the first state of the second state of the | and the second | | | and the second | | | Contraction of the local division of the loc | Production of the local division of the | | | A CONTRACTOR OF A CONTRACTOR OFTA CONTRACTOR O | Contraction of the local data |

AIR EMISSION CALCULATIONS

OMB Control No. 1010-0049 OMB Approval Expires: August 31, 2006

| COMPANY | AREA | BLOCK | LEASE | PLATFORM | WELL |
|----------------|--------------|---------|---------|-----------|----------|
| EnVen Energy \ | West Cameron | 265 | G 32112 | В | B-1ST |
| Year | | Emitted | | Substance | |
| | РМ | SOx | NOx | voc | со |
| 2019 | 9.84 | 44.91 | 478.91 | 18.84 | 92.74 |
| 2020 | 1.22 | 5.36 | 182.52 | 9.94 | 28.07 |
| 2021 | 1.22 | 5.36 | 182.52 | 9.94 | 28.07 |
| 2022 | 1.22 | 5.36 | 182.52 | 9.94 | 28.07 |
| 2023 | 1.22 | 5.36 | 182.52 | 9.94 | 28.07 |
| 2024 | 1.22 | 5.36 | 182.52 | 9.94 | 28.07 |
| 2025 | 1.22 | 5.36 | 182.52 | 9.94 | 28.07 |
| 2026 | 1.22 | 5.36 | 182.52 | 9.94 | 28.07 |
| 2027 | 1.22 | 5.36 | 182.52 | 9.94 | 28.07 |
| 2028 | 1.22 | 5.36 | 182.52 | 9.94 | 28.07 |
| 2029 | 1.22 | 5.36 | 182.52 | 9.94 | 28.07 |
| 2030 | 1.22 | 5.36 | 182.52 | 9.94 | 28.07 |
| Allowable | 1864.80 | 1864.80 | 1864.80 | 1864.80 | 49766.56 |

DOCD AIR QUALITY SCREENING CHECKLIST

| | PLAN EMISSIONS |
|-----------------|---|
| REMARKS | Drill, complete & produce Well No. B-1 ST |
| TELEPHONE NO. | 713-335-7041 |
| COMPANY CONTACT | Cheryl Powell |
| WELL | B-1ST |
| PLATFORM | В |
| LEASE | G 32112 |
| BLOCK | 265 |
| AREA | West Cameron |
| COMPANY | EnVen Energy Ventures, LLC |
| | Ollid ApplotateA |

| LEASE TERI | LEASE TERM PIPELINE CONSTRUCTION INFORMATION: | | | | | | | | | |
|------------|---|-----------------------------------|--|--|--|--|--|--|--|--|
| YEAR | NUMBER OF PIPELINES | TOTAL NUMBER OF CONSTRUCTION DAYS | | | | | | | | |
| 1999 | | | | | | | | | | |
| 2000 | | | | | | | | | | |
| 2001 | | | | | | | | | | |
| 2002 | | | | | | | | | | |
| 2003 | | | | | | | | | | |
| 2004 | | | | | | | | | | |
| 2005 | | | | | | | | | | |
| 2006 | | | | | | | | | | |
| 2007 | | | | | | | | | | |
| 2008 | | | | | | | | | | |
| 2009 | | | | | | | | | | |

SECTION I OIL SPILLS INFORMATION

A. OIL SPILL RESPONSE PLANNING

The proposed activities are in the Central Planning Area of the GOM. Therefore, a site-specific Oil Spill Response Plan (OSRP) is not required for this plan.

B. REGIONAL OSRP INFORMATION

All the proposed activities and facilities in this DOCD will be covered by the Oil Spill Response Plan filed by EnVen Energy Ventures, LLC (BOEM Operator Number 03026) in accordance with 30 CFR 254 and approved on August 10, 2018.

1. SPILL RESPONSE SITES

| Primary Response Equipment Location | Preplanned Staging Location |
|--|-----------------------------|
| Houma, LA and Venice, LA | Houma, LA and Venice, LA |

C. OSRO INFORMATION

EnVen utilizes the Clean Gulf Associates (CGA) as the primary providers for oil spill removal equipment.

D. WORST-CASE SCENARIO COMPARISON

A comparison from EnVen's approved regional OSRP with the worst-case scenario from the proposed activities in this DOCD is provided in the table below.

The proposed activities are greater than ten miles seaward of the coastline, therefore, the "far-shore" worst case scenario is provided as the "drilling and/or production" worst case scenario.

| | Dril | ling | Production | | | |
|--|--|---|--|---|--|--|
| Category | Regional OSRP WCD | DOCD WCD | Regional OSRP WCD | DOCD WCD | | |
| Type of Activity | >10 mile Drilling | Development Drilling | >10 mile Production | Production | | |
| Facility Location (Area/Block) | GC 248 | WC 265 | VR 356 (BH SM 166) | WC 265 | | |
| Facility Designation | Well GL-5 ST | B-1 ST01 | A | В | | |
| Distance to Nearest Shoreline (miles) | 86 | 56 | 92 miles | 56 | | |
| Volume Storage tanks (total) Lease term pipelines Flowlines Uncontrolled blowout Total Volume | 0 0 <u>157,408</u> 157,408 | 0 25 10 <u>12,910</u> 12,945 | 1,650 0 <u>32,669</u> 34,319 | 0 25 10 <u>4071</u> 4106 | | |
| Type of Oil(s) (crude, condensate, diesel) | Crude | Crude | Crude | Crude | | |
| API Gravity | 32° | 34° | 33° | 34° | | |

Since EnVen has the capability to respond to the worst-case spill scenario included in our Regional OSRP approved on August 10, 2018, and since the worst-case scenario determined for our DOCD does not replace the worst-case scenario in our Regional OSRP, I hereby certify that EnVen has the capability to respond, to the maximum extent practicable, to a worst-case discharge, or a substantial threat of such a discharge, resulting from the activities proposed in our DOCD.

In accordance with NTL 2015-N01, supporting documentation for the calculations and assumptions used to determine the worst case discharge for the activities proposed in this plan is included as **Attachment I-1**.

E. OIL SPILL RESPONSE DISCUSSION (NEPA ANALYSIS)

Not required for the proposed operations

SECTION J ENVIRONMENTAL MONITORING INFORMATION

A. MONITORING SYSTEMS

There are no environmental monitoring systems currently in place or planned for the proposed activities.

B. INCIDENTAL TAKES

Although marine mammals may be seen in the area, EnVen does not believe that its operations proposed under this plan will result in the harassment, capture, collection or killing of any mammals covered by the Marine Mammal Protection Act.

C. FLOWER GARDEN BANKS NATIONAL MARINE SANCTUARY

West Cameron Block 265 is not located in the Flower Garden Banks National Marine Sanctuary; therefore, the requested information is not required in this DOCD.

SECTION K LEASE STIPULATIONS INFORMATION

Oil and gas development activities on the OCS are subject to stipulations developed before the lease sale and would be attached to the lease instrument, as necessary, in the form of mitigating measures. The BOEM is responsible for ensuring full compliance with stipulations.

Development activities are subject to the following stipulations attached to Lease OCS-G 32112, West Cameron Block 265.

Military Warning Area (MWA)

West Cameron Block 265 is located within designated MWA-W-147. The 147 OSS/OSA will be contacted in order to coordinate and control the electromagnetic emissions during the proposed operations.

Marine Protected Species

Lease Stipulation No. 8 is meant to reduce the potential taking of marine protected species. EnVen will operate in accordance with NTL 2012-JOINT-G02, to minimize the risk of vessel strikes to protected species and report observations of injured or dead protected species, and the prevention of intentional and/or accidental introduction of debris into the marine environment.

SECTION L ENVIRONMENTAL MITIGATION MEASURES INFORMATION

A. MEASURES TAKEN TO AVOID, MINIMIZE, AND MITIGATE IMPACTS Activities in this DOCD do not impact the State of Florida.

B. INCIDENTAL TAKES

EnVen Energy Ventures, LLC will adhere to the requirements as set forth in the following documents, as applicable, to avoid or minimize impacts to any of the species listed in the ESA as a result of the operations conducted herein:

- NTL 2012-Joint-G01, "Vessel Strike Avoidance and Injured/Dead Protected Species Reporting
- NTL 2012-BSEE-G01, "Marine Trash and Debris Awareness and Elimination"
- NTL 2012-Joint-G02, "Implementation of Seismic Survey Mitigation Measures and Protected Species Observer Program"

SECTION M RELATED FACILITIES AND OPERATIONS INFORMATION

(A) RELATED OCS FACILITIES AND OPERATIONS

The subject well will be protected by the existing B platform and production will flow via the existing right-of-way pipeline (Segment No. 18054) originating at West Cameron Block 265, Platform B and terminating at West Cameron Block 269 36" SSTI. This pipeline is 11955' in length with a maximum flow rate of 500 BOPD and a shut-in time of maximum 45 seconds.

(B) TRANSPORTATION SYSTEM

Production will be processed and measured for sales and royalty purposes at the existing facility. Production will be transported via the existing 6.625" gas/condensate right-of-way pipeline from the existing B platform to a subsea tiein located on Stingray's pipeline Segment No. 7358 in West Cameron Block 269. Production will be transported to an existing onshore facility via Stingray's Pipeline Segment No. 3507.

(C) PRODUCED LIQUID HYDROCARBONS TRANSPORTATION VESSELS

EnVen will not transfer liquid hydrocarbons using any method other than via pipeline.

(D) DECOMMISSIONING INFORMATION

Subsequent to applicable lease expirations, abandonment activities will be conducted in accordance with all state and federal regulations.

SECTION N SUPPORT VESSELS AND AIRCRAFT INFORMATION

A. GENERAL

EnVen will travel the most practical, direct route from the shorebase to West Cameron Block 265 as permitted by weather and traffic conditions.

| Туре | Maximum Fuel Tank Capacity | Maximum Number in Area at Any Time | Trip Frequency or Duration | |
|-------------|-------------------------------|--|----------------------------------|--|
| Tug Boats | 3000 bbls | 2 | 2 days | |
| Crew Boat | 400 bbls | 1 | 3 times/week | |
| Supply Boat | 2380 bbls | 1 | 3 times/week | |
| Helicopter | 760 gallons | 1 | As Needed | |

B. DIESEL OIL SUPPLY VESSELS

Not applicable, per NTL 2008-G04.

C. DRILLING FLUID TRANSPORTATION

Not applicable, per NTL 2008-G04.

D. SOLID AND LIQUID WASTE TRANSPORTATION

Not applicable, per NTL 2008-G04.

E. VICINITY MAP

A vicinity map showing the location of the proposed activities relative to the shoreline, the distance of the proposed activities from the shoreline and the support base, and the primary route of the support vessels and aircraft that will be used when traveling between the onshore support facilities is included as **Attachment N-1**.





Attachment N-1

SECTION O ONSHORE SUPPORT FACILITIES INFORMATION

A. GENERAL

Provided in the table below is a list of the onshore facilities that will be used to provide supply and service support for the proposed activities:

| Name | Location | Existing/New/Modified |
|----------|-------------|-----------------------|
| ELI Dock | Cameron, LA | Existing |

B. SUPPORT BASE CONSTRUCTION OR EXPANSION

EnVen does not propose any land acquisitions for the construction of an onshore support base, nor will we expand the existing shorebase as a result of the operations proposed in this DOCD.

C. SUPPORT BASE CONSTRUCTION OR EXPANSION TIMETABLE

There will be no new construction of an onshore support base, nor will we expand the existing shorebase as a result of the operations proposed in this DOCD.

D. WASTE DISPOSAL

| Name/Location of Facility | Type of waste | Amount | Disposal Method |
|------------------------------|------------------|--------------------|---|
| Cameron, LA | Completion Fluid | 200 bbls | Environmental Drum/tote tank to shorebase; trucked to recycling facility |
| Cameron, LA | Trash and Debris | 150 cu.ft./week | Storage bins to shorebase; trucked to landfill |
| Cameron, LA | Motor Oil | 70 gal/week | Tote tank to shorebase; trucked to recycle facility |

SECTION P COASTAL ZONE MANAGEMENT (CZMA) INFORMATION

Under the direction of the Coastal Zone Management Act (CZMA), the states of Alabama, Florida, Louisiana, Mississippi and Texas developed Coastal Zone Management Programs (CZMP) to allow for the supervision of significant land and water use activities that take place within or that could significantly impact their respective coastal zones.

The activities proposed in this plan do not require consistency from the state of Louisiana.

SECTION Q ENVIRONMENTAL IMPACT ANALYSIS (EIA)

EnVen Energy Ventures, LLC (EnVen)

Supplemental Development Operations Coordination Document West Cameron Block 265 OCS-G 32112

(A) IMPACT PRODUCING FACTORS

ENVIRONMENTAL IMPACT ANALYSIS WORKSHEET

| Environment Resources | Impact Producing Factors (IPFs) Categories and Examples Refer to recent GOM OCS Lease Sale EIS for a more complete list of IPF | | | | | | |
|---------------------------------------|--|---|---|---|---|--------------------------------|--|
| | Emissions (air, noise, light, etc.) | Effluents (muds, cutting, other discharges to the water column or seafloor) | Physical disturbances to the seafloor (rig or anchor emplacements, etc.) | Wastes sent to shore for treatment or disposal | Accidents (e.g., oil spills, chemical spills, H ₂ S releases) | Discarded Trash & Debris | |
| Site-specific at Offshore Location | | | | | | | |
| Designated topographic features | | (1) | (1) | | (1) | | |
| Pinnacle Trend area live bottoms | | (2) | (2) | | (2) | | |
| Eastern Gulf live bottoms | | (3) | (3) | | (3) | | |
| Benthic communities | | | (4) | | | | |
| Water quality | | X | X | | х | | |
| Fisheries | | x | X | | Х | | |
| Marine Mammals | X(8) | X | | | X(8) | X | |
| Sea Turtles | X(8) | Х | | | X(8) | X | |
| Air quality | X(9) | | | | | | |
| Shipwreck sites (known or potential) | | | (7) | | | | |
| Prehistoric archaeological sites | | | X(7) | | | | |
| Vicinity of Offshore Location | | | | | | | |
| Essential fish habitat | | X | Х | | X(6) | | |
| Marine and pelagic birds | Х | | | | Х | X | |
| Public health and safety | | | | | (5) | | |
| | | | | | | | |
| Coastal and Onshore | | | | | ······································ | | |
| Beaches | | | | | X(6) | X X | |
| Wetlands | | | | | X(6) | | |
| Shore birds and coastal nesting birds | | | | | X(6) | Х | |
| Coastal wildlife refuges | | | | | X | | |
| Wilderness areas | | | | | X | | |
| | | | | | | | |

Footnotes for Environmental Impact Analysis Matrix

- 1) Activities that may affect a marine sanctuary or topographic feature. Specifically, if the well or platform site or any anchors will be on the seafloor within the:
 - o 4-mile zone of the Flower Garden Banks, or the 3-mile zone of Stetson Bank;
 - 1000-m, 1-mile or 3-mile zone of any topographic feature (submarine bank) protected by the Topographic Features Stipulation attached to an OCS lease;
 - o Essential Fish Habitat (EFH) criteria of 500 ft. from any no-activity zone; or
 - Proximity of any submarine bank (500 ft. buffer zone) with relief greater than 2 meters that is not protected by the Topographic Features Stipulation attached to an OCS lease.
- 2) Activities with any bottom disturbance within an OCS lease block protected through the Live Bottom (Pinnacle Trend) Stipulation attached to an OCS lease.
- 3) Activities within any Eastern Gulf OCS block where seafloor habitats are protected by the Live Bottom (Low-Relief) Stipulation attached to an OCS lease.
- 4) Activities on blocks designated by the BOEM as being in water depths 300 meters or greater.
- 5) Exploration or production activities where H2S concentrations greater than 500 ppm might be encountered.
- 6) All activities that could result in an accidental spill of produced liquid hydrocarbons or diesel fuel that you determine would impact these environmental resources. If the proposed action is located a sufficient distance from a resource that no impact would occur, the EIA can note that in a sentence or two.
- 7) All activities that involve seafloor disturbances, including anchor emplacements, in any OCS block designated by the BOEM as having high-probability for the occurrence of shipwrecks or prehistoric sites, including such blocks that will be affected that are adjacent to the lease block in which your planned activity will occur. If the proposed activities are located a sufficient distance from a shipwreck or a prehistoric site that no impact would occur, the EIA can note that in a sentence or two.
- 8) All activities that you determine might have an adverse effect on endangered or threatened marine mammals or sea turtles or their critical habitats.
- 9) Production activities that involve transportation of produced fluids to shore using shuttle tankers or barges.

(B) ANALYSIS

Site-Specific at West Cameron Block 265

Proposed operations consist of the sidetrack drilling, completion, and commencement of production from one well.

Operations will be conducted with a Jack-up Rig.

1. Designated Topographic Features

Potential IPFs on topographic features include physical disturbances to the seafloor, effluents, and accidents.

Physical disturbances to the seafloor: West Cameron Block 265 is 56 miles from the closest designated Topographic Features Stipulation Block (Sonnier Bank); therefore, no adverse impacts are expected.

Effluents: West Cameron Block 265 is 56 miles from the closest designated Topographic Features Stipulation Block (Sonnier Bank); therefore, no adverse impacts are expected.

Accidents: It is unlikely that an accidental surface or subsurface spill would occur from the proposed activities (refer to statistics in Item 5, Water Quality). Oil spills cause damage to benthic organisms only if the oil contacts the organisms. Oil from a surface spill can be driven into the water column; measurable amounts have been documented down to a 10 m depth. At this depth, the oil is found only at concentrations several orders of magnitude lower than the amount shown to have an effect on corals. Because the crests of topographic features in the Northern Gulf of Mexico are found below 10 m, no oil from a surface spill could reach their sessile biota. Oil from a subsurface spill is not applicable due to the distance of these blocks from a topographic area. The activities proposed in this plan will be covered by EnVen's Regional OSRP (refer to information submitted in Appendix I).

There are no other IPFs (including emissions and wastes sent to shore for disposal) from the proposed activities, which could impact topographic features.

2. Pinnacle Trend Area Live Bottoms

Potential IPFs on pinnacle trend area live bottoms include physical disturbances to the seafloor, effluents, and accidents.

Physical disturbances to the seafloor: West Cameron Block 265 is 281 miles from the closest live bottom (pinnacle trend) area; therefore, no adverse impacts are expected.

Effluents: West Cameron Block 265 is 281 miles from the closest live bottom (pinnacle trend) area; therefore, no adverse impacts are expected.

Accidents: It is unlikely that an accidental surface or subsurface spill would occur from the proposed activities (refer to statistics in Item 5, Water Quality). Oil spills have the potential to foul benthic communities and cause lethal and sublethal effects on live bottom organisms. Oil from a surface spill can be driven into the water column; measurable amounts have been documented down to a 10 m depth. At this depth, the oil is found only at concentrations several orders of magnitude lower than the amount shown to have an effect on marine organisms. Oil from a subsurface spill is not applicable due to the distance of these blocks from a live bottom (pinnacle trend) area. The activities proposed in this plan will be covered by EnVen's Regional OSRP (refer to information submitted in Appendix I).

There are no other IPFs (including emissions and wastes sent to shore for disposal) from the proposed activities which could impact a live bottom (pinnacle trend) area.

3. Eastern Gulf Live Bottoms

Potential IPFs on Eastern Gulf live bottoms include physical disturbances to the seafloor, effluents, and accidents.

Physical disturbances to the seafloor: West Cameron Block 265 is not located in an area characterized by the existence of live bottoms, and this lease does not contain a Live-Bottom Stipulation requiring a photo documentation survey and survey report.

Effluents: West Cameron Block 265 is not located in an area characterized by the existence of live bottoms; therefore, no adverse impacts are expected.

Accidents: It is unlikely that an accidental surface or subsurface spill would occur from the proposed activities (refer to statistics in Item 5, Water Quality). Oil spills cause damage to live bottom organisms only if the oil contacts the organisms. Oil from a surface spill can be driven into the water column; measurable amounts have been documented down to a 10 m depth. At this depth, the oil is found only at concentrations several orders of magnitude lower than the amount shown to have an effect on marine invertebrates. Oil from a subsurface spill is not applicable due to the distance of these blocks from a live bottom area. The activities proposed in this plan will be covered by EnVen's Regional OSRP (refer to information submitted in Appendix I).

There are no other IPFs (including emissions and wastes sent to shore for disposal) from the proposed activities which could impact an Eastern Gulf live bottom area.

4. Benthic Communities

There are no IPFs (including emissions, physical disturbances to the seafloor, wastes sent to shore for disposal, or accidents) from the proposed activities that could cause impacts to benthic communities.

Operations proposed in this plan are in water depths of 77 feet. High-density benthic communities are found only in water depths greater than 984 feet (300 meters); therefore, EnVen's proposed operations in West Cameron Block 265 would not cause impacts to benthic communities.

5. Water Quality

IPFs that could result in water quality degradation from the proposed operations in West Cameron Block 265 include disturbances to the seafloor, effluents and accidents.

Physical disturbances to the seafloor: Bottom area disturbances resulting from the emplacement of drill rigs, the drilling of wells and the installation of platforms and pipelines would increase water-column turbidity and re-suspension of any accumulated pollutants, such as trace metals and excess nutrients. This would cause short-lived impacts on water quality conditions in the immediate vicinity of the emplacement operations.

Effluents: Levels of contaminants in drilling muds and cuttings and produced water discharges, discharge-rate restrictions and monitoring and toxicity testing are regulated by the EPA NPDES permit, thereby eliminating many significant biological or ecological effects. Operational discharges are not expected to cause significant adverse impacts to water quality.

Accidents: Oil spills have the potential to alter offshore water quality; however, it is unlikely that an accidental surface or subsurface spill would occur from the proposed activities. Between 1980 and 2000, OCS operations produced 4.7 billion barrels of oil and spilled only 0.001 percent of this oil, or 1 bbl for every 81,000 bbl produced. The spill risk related to a diesel spill from drilling operations is even less. Between 1976 and 1985, (years for which data were collected), there were 80 reported diesel spills greater than one barrel associated with drilling activities. Considering that there were 11,944 wells drilled, this is a 0.7 percent probability of an occurrence. If a spill were to occur, the water quality of marine waters would be temporarily affected by the dissolved components and small oil droplets. Dispersion by currents and microbial degradation would remove the oil from the water column and dilute the constituents to background levels. Historically, changes in offshore water quality from oil spills have only been detected during the life of the spill and up to several months afterwards. Most of the components of oil are insoluble in water and therefore float. The activities proposed in this plan will be covered by EnVen's Regional Oil Spill Response Plan (refer to information submitted in **Appendix I**).

There are no other IPFs (including emissions, physical disturbances to the seafloor, and wastes sent to shore for disposal) from the proposed activities which could cause impacts to water quality.

6. Fisheries

IPFs that could cause impacts to fisheries as a result of the proposed operations in West Cameron Block 265 include physical disturbances to the seafloor, effluents and accidents.

Physical disturbances to the seafloor: The emplacement of a structure or drilling rig results in minimal loss of bottom trawling area to commercial fishermen. Pipelines cause gear conflicts which result in losses of trawls and shrimp catch, business downtime and vessel damage. Most financial losses from gear conflicts are covered by the Fishermen's Contingency Fund (FCF). The emplacement and removal of facilities are not expected to cause significant adverse impacts to fisheries.

Effluents: Effluents such as drilling fluids and cuttings discharges contain components and properties which are detrimental to fishery resources. Moderate petroleum and metal contamination of sediments and the water column can occur out to several hundred meters down-current from the discharge point. Offshore discharges are expected to disperse and dilute to very near background levels in the water column or on the seafloor within 3,000 m of the discharge point, and are expected to have negligible effect on fisheries.

Accidents: An accidental oil spill has the potential to cause some detrimental effects on fisheries; however, it is unlikely that such an event would occur from the proposed activities (refer to **Item 5**, Water Quality). The effects of oil on mobile adult finfish or shellfish would likely be sublethal and the extent of damage would be reduced to the capacity of adult fish and shellfish to avoid the spill, to metabolize hydrocarbons, and to excrete both metabolites and parent compounds. The activities proposed in this plan will be covered by EnVen's Regional OSRP (refer to information submitted in **Appendix I**).

There are no IPFs from emissions, or wastes sent to shore for disposal from the proposed activities which could cause impacts to fisheries.

7. Marine Mammals

GulfCet II studies revealed that cetaceans of the continental shelf and shelf-edge were almost exclusively bottlenose dolphin and Atlantic spotted dolphin. Squid eaters, including dwarf and pygmy killer whale, Risso's dolphin, rough-toothed dolphin, and Cuvier's beaked whale, occurred most frequently along the upper slope in areas outside of anticyclones. IPFs that could cause impacts to marine mammals as a result of the proposed operations in West Cameron Block 265 include emissions, effluents, discarded trash and debris, and accidents.

Emissions: Noises from drilling activities, support vessels and helicopters may elicit a startle reaction from marine mammals. This reaction may lead to disruption of marine mammals' normal activities. Stress may make them more vulnerable to parasites, disease, environmental contaminants, and/or predation (Majors and Myrick, 1990). There is little conclusive evidence for long-term displacements and population trends for marine mammals relative to noise.

Effluents: Drilling fluids and cuttings discharges contain components which may be detrimental to marine mammals. Most operational discharges are diluted and dispersed upon release. Any potential impact from drilling fluids would be indirect, either as a result of impacts on prey items or possibly through ingestion in the food chain (API, 1989).

Discarded trash and debris: Both entanglement in, and ingestion of debris have caused the death or serious injury of marine mammals (Laist, 1997; MMC, 1999). The limited amount of marine debris, if any, resulting from the proposed activities is not expected to substantially harm marine mammals. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA).

EnVen will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "Think About It" (*previously "All Washed Up: The Beach Litter Problem"*). Thereafter, all personnel will view the marine trash and debris training video annually. Offshore personnel will also receive an explanation from EnVen management or the designated lease operator management that emphasizes their commitment to waste management in accordance with NTL No. 2015-G03-BSEE.

Accidents: Collisions between support vessels and cetaceans would be unusual events, however should one occur, death or injury to marine mammals is possible. Contract vessel operators can avoid marine mammals and reduce potential deaths by maintaining a vigilant watch for marine mammals, maintaining a safe distance when they are sighted, and reducing vessel speeds when assemblages of cetaceans are observed. Specific mitigation measures found in NTL No. 2016-G01-BOEM will be followed. Vessel personnel should use a Gulf of Mexico reference guide to help identify the twenty-one species of whales and dolphins, and the single species of manatee

that may be encountered in the Gulf of Mexico OCS. Vessel personnel must report sightings of any injured or dead protected marine mammal species immediately, regardless of whether the injury or death is caused by their vessel, to the NMFS Southeast Marine Mammal Stranding Hotline at 1-877-433-8299 (http://www.nmfs.noaa.gov/pr/health/report.htm#southeast). Any injured or dead protected species should also be reported to <u>takereport.nmfsser@noaa.gov</u>. In addition, if the injury or death was caused by a collision with a contract vessel, the BOEM must be notified within 24 hours of the strike by email to <u>protectedspecies@bsee.gov</u>. If the vessel is the responsible party, it is required to remain available to assist the respective salvage and stranding network as needed.

Oil spills have the potential to cause sublethal oil-related injuries and spill-related deaths to marine mammals. However, it is unlikely that an accidental oil spill would occur from the proposed activities (refer to **Item 5**, Water Quality). Oil spill response activities may increase vessel traffic in the area, which could add to changes in cetacean behavior and/or distribution, thereby causing additional stress to the animals. The effect of oil dispersants on cetaceans is not known. The acute toxicity of oil dispersant chemicals included in EnVen's OSRP is considered to be low when compared with the constituents and fractions of crude oils and diesel products. The activities proposed in this plan will be covered by EnVen's OSRP (refer to information submitted in accordance with **Appendix I**).

There are no other IPFs (including physical disturbances to the seafloor) from the proposed activities which could impact marine mammals.

8. Sea Turtles

IPFs that could cause impacts to sea turtles as a result of the proposed operations include emissions, effluents, discarded trash and debris, and accidents. GulfCet II studies sighted most loggerhead, Kemp's ridley and leatherback sea turtles over shelf waters. Historically these species have been sighted up to the shelf's edge. They appear to be more abundant east of the Mississippi River than they are west of the river (Fritts et al., 1983b; Lohoefener et al., 1990). Deep waters may be used by all species as a transitory habitat.

Emissions: Noise from drilling activities, support vessels, and helicopters may elicit a startle reaction from sea turtles, but this is a temporary disturbance.

Effluents: Drilling fluids and cuttings discharges are not known to be lethal to sea turtles. Most operational discharges are diluted and dispersed upon release. Any potential impact from drilling fluids would be indirect, either as a result of impacts on prey items or possibly through ingestion in the food chain (API, 1989).

Discarded trash and debris: Both entanglement in, and ingestion of, debris have caused the death or serious injury of sea turtles (Balazs, 1985). The limited amount of marine debris, if any, resulting from the proposed activities is not expected to substantially harm sea turtles. Operators

are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). EnVen will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "Think About It" (*previously "All Washed Up: The Beach Litter Problem"*). Thereafter, all personnel will view the marine trash and debris training video annually. Offshore personnel will also receive an explanation from EnVen management or the designated lease operator management that emphasizes their commitment to waste management in accordance with NTL No. 2015-G03-BSEE.

Accidents: Collisions between support vessels and sea turtles would be unusual events, however should one occur, death or injury to sea turtles is possible. Contract vessel operators can avoid sea turtles and reduce potential deaths by maintaining a vigilant watch for sea turtles and maintaining a safe distance when they are sighted. Specific mitigation measures found in NTL No. 2016-G01-BOEM will be followed. Vessel crews should use a reference guide to help identify the five species of sea turtles that may be encountered in the Gulf of Mexico OCS. Vessel crews must report sightings of any injured or dead protected sea turtle species immediately, regardless of whether the injury or death is caused by their vessel, to the State Coordinators for the Sea Turtle Stranding and Salvage Network (STSSN) at http://www.sefsc.noaa.gov/species/turtles/stranding coordinators.htm (phone numbers vary by Any injured or dead protected species should also be reported to state). takereport.nmfsser@noaa.gov. In addition, if the injury or death was caused by a collision with a contract vessel, the BOEM must be notified within 24 hours of the strike by email to protectedspecies@bsee.gov. If the vessel is the responsible party, it is required to remain available to assist the respective salvage and stranding network as needed.

All sea turtle species and their life stages are vulnerable to the harmful effects of oil through direct contact or by fouling of their food. Exposure to oil can be fatal, particularly to juveniles and hatchlings. However, it is unlikely that an accidental oil spill would occur from the proposed activities (refer to **Item 5**, Water Quality). Oil spill response activities may increase vessel traffic in the area, which could add to the possibility of collisions with sea turtles. The activities proposed in this plan will be covered by EnVen's Regional Oil Spill Response Plan (refer to information submitted in accordance with **Appendix I**).

There are no other IPFs (including physical disturbances to the seafloor) from the proposed activities which could impact sea turtles.

9. Air Quality

The projected air emissions identified in **Appendix H** are not expected to affect the OCS air quality primarily due to distance to the shore or to any Prevention of Significant Deterioration Class I air quality area such as the Breton Wilderness Area. West Cameron Block 265 is beyond the 200 kilometer (124 mile) buffer for the Breton Wilderness Area and is 56 miles from the coastline. Therefore, no special mitigation, monitoring, or reporting requirements apply with respect to air emissions.

Accidents and blowouts can release hydrocarbons or chemicals, which could cause the emission of air pollutants. However, these releases would not impact onshore air quality because of the prevailing atmospheric conditions, emission height, emission rates, and the distance of West Cameron Block 265 from the coastline. There are no other IPFs (including effluents, physical disturbances to the seafloor, wastes sent to shore for treatment or disposal) from the proposed activities which could impact air quality.

10. Shipwreck Sites (known or potential)

IPFs that could impact known or unknown shipwreck sites as a result of the proposed operations in West Cameron Block 265 include disturbances to the seafloor and accidents (oil spill). West Cameron Block 265 is not located in or adjacent to an OCS block designated by BOEM as having a high probability for occurrence of shipwrecks. EnVen will report to BOEM the discovery of any evidence of a shipwreck and make every reasonable effort to preserve and protect that cultural resource. There are no other IPFs (including emissions, effluents, wastes sent to shore for treatment or disposal, or accidents) from the proposed activities which could impact shipwreck sites.

Accidents: An accidental oil spill has the potential to cause some detrimental effects to shipwreck sites if the release were to occur subsea. However, it is unlikely that an accidental oil spill would occur from the proposed activities (refer to Item 5, Water Quality). The activities proposed in this plan will be covered by EnVen's Regional Oil Spill Response Plan (refer to information submitted in accordance with Appendix I).

There are no other IPFs (including emissions, effluents, or wastes sent to shore for treatment or disposal) from the proposed activities that could cause impacts to shipwreck sites.

11. Prehistoric Archaeological Sites

IPFs that could cause impacts to prehistoric archaeological sites as a result of the proposed operations in West Cameron Block 265 are physical disturbances to the seafloor and accidents (oil spills).

Physical Disturbances to the seafloor: West Cameron Block 265 is located inside the Archaeological Prehistoric high probability lines. EnVen will report to BOEM the discovery of any object of prehistoric archaeological significance and make every reasonable effort to preserve and protect that cultural resource.

Accidents: An accidental oil spill has the potential to cause some detrimental effects to prehistoric archaeological sites if the release were to occur subsea. However, it is unlikely that an accidental oil spill would occur from the proposed activities (refer to Item 5, Water Quality). The activities proposed in this plan will be covered by EnVen's Regional Oil Spill Response Plan (refer to information submitted in accordance with Appendix I).

There are no other IPFs (including emissions, effluents, wastes sent to shore for treatment or disposal) from the proposed activities that could cause impacts to prehistoric archaeological sites.

Vicinity of Offshore Location

1. Essential Fish Habitat (EFH)

IPFs that could cause impacts to EFH as a result of the proposed operations in West Cameron Block 265 include physical disturbances to the seafloor, effluents and accidents. EFH includes all estuarine and marine waters and substrates in the Gulf of Mexico.

Physical disturbances to the seafloor: The Live Bottom Low Relief Stipulation, the Live Bottom (Pinnacle Trend) Stipulation, and the Eastern Gulf Pinnacle Trend Stipulation would prevent most of the potential impacts on live-bottom communities and EFH from bottom disturbing activities (e.g., anchoring, structure emplacement and removal).

Effluents: The Live Bottom Low Relief Stipulation, the Live Bottom (Pinnacle Trend) Stipulation, and the Eastern Gulf Pinnacle Trend Stipulation would prevent most of the potential impacts on live-bottom communities and EFH from operational waste discharges. Levels of contaminants in drilling muds and cuttings and produced-water discharges, discharge-rate restrictions, and monitoring and toxicity testing are regulated by the EPA NPDES permit, thereby eliminating many significant biological or ecological effects. Operational discharges are not expected to cause significant adverse impacts to EFH.

Accidents: An accidental oil spill has the potential to cause some detrimental effects on EFH. Oil spills that contact coastal bays and estuaries, as well as OCS waters when pelagic eggs and larvae are present, have the greatest potential to affect fisheries. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water Quality). The activities proposed in this plan will be covered by EnVen's Regional OSRP (refer to information submitted in Appendix I).

There are no other IPFs (including emissions, or wastes sent to shore for treatment or disposal) from the proposed activities which could impact essential fish habitat.

2. Marine and Pelagic Birds

IPFs that could impact marine birds as a result of the proposed activities include air emissions, accidental oil spills, and discarded trash and debris from vessels and the facilities.

Emissions: Emissions of pollutants into the atmosphere from these activities are far below concentrations which could harm coastal and marine birds.

Accidents: An oil spill would cause localized, low-level petroleum hydrocarbon contamination. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water Quality). Marine and pelagic birds feeding at the spill location may experience chronic, nonfatal, physiological stress. It is expected that few, if any, coastal and marine birds would actually be affected to that extent. The activities proposed in this plan will be covered by EnVen's Regional OSRP (refer to information submitted in Appendix I).

Discarded trash and debris: Marine and pelagic birds could become entangled and snared in discarded trash and debris, or ingest small plastic debris, which can cause permanent injuries and death. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). EnVen will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass. Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "Think About It" (previously "All Washed Up: The Beach Litter Problem"). Thereafter, all personnel will view the marine trash and debris training video annually. Offshore personnel will also receive an explanation from EnVen management or the designated lease operator management that emphasizes their commitment to waste management in accordance with NTL No. 2015-G03-BSEE. Debris, if any, from these proposed activities will seldom interact with marine and pelagic birds; therefore, the effects will be negligible.

There are no other IPFs (including effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities which could impact marine and pelagic birds.

3. Public Health and Safety Due to Accidents.

There are no IPFs (emissions, effluents, physical disturbances to the seafloor, wastes sent to shore for treatment or disposal or accidents, including an accidental H2S releases) from the proposed activities which could cause impacts to public health and safety. In accordance with NTL No.'s 2008-G04, 2009-G27, and 2009-G31, sufficient information is included in **Appendix D** to justify our request that our proposed activities be classified by BSEE as H_2S absent.

Coastal and Onshore

1. Beaches

IPFs from the proposed activities that could cause impacts to beaches include accidents (oil spills) and discarded trash and debris.

Accidents: Oil spills contacting beaches would have impacts on the use of recreational beaches and associated resources. Due to the distance from shore (56 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. The activities proposed in this plan will be covered by EnVen's Regional OSRP (refer to information submitted in **Appendix I**).

Discarded trash and debris: Trash on the beach is recognized as a major threat to the enjoyment and use of beaches. There will only be a limited amount of marine debris, if any, resulting from the proposed activities. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). EnVen will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "Think About It" (*previously "All Washed Up: The Beach Litter Problem"*). Thereafter, all personnel will view the marine trash and debris training video annually. Offshore

personnel will also receive an explanation from EnVen management or the designated lease operator management that emphasizes their commitment to waste management in accordance with NTL No. 2015-G03-BSEE.

There are no other IPFs (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities which could impact beaches.

2. Wetlands

IPFs from the proposed activities that could cause impacts to wetlands include accidents (oil spills) and discarded trash and debris.

Accidents: It is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water Quality). Due to the distance from shore (56 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by EnVen's Regional OSRP (refer to information submitted in Appendix I).

Discarded trash and debris: There will only be a limited amount of marine debris, if any, resulting from the proposed activities. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). EnVen will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on all vessels and facilities having sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "Think About It" (*previously "All Washed Up: The Beach Litter Problem"*). Thereafter, all personnel will view the marine trash and debris training video annually. Offshore personnel will also receive an explanation from EnVen management or the designated lease operator management that emphasizes their commitment to waste management in accordance with NTL No. 2015-G03-BSEE.

There are no other IPFs (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities which could impact wetlands.

3. Shore Birds and Coastal Nesting Birds

Accidents: Oil spills could cause impacts to shore birds and coastal nesting birds. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water Quality). Given the distance from shore (56 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by EnVen's Regional OSRP (refer to information submitted in Appendix I).

Discarded trash and debris: Coastal and marine birds are highly susceptible to entanglement in floating, submerged, and beached marine debris: specifically plastics. Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V and the Marine Plastic Pollution Research and Control Act, and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). EnVen will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on vessels and every facility that has sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "Think About It" (*previously "All Washed Up: The Beach Litter Problem"*). Thereafter, all personnel will view the marine trash and debris training video annually. Offshore personnel will also receive an explanation from EnVen management or the designated lease operator management that emphasizes their commitment to waste management in accordance with NTL No. 2015-G03-BSEE.

There are no other IPFs (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities that could cause impacts to shore birds and coastal nesting birds.

4. Coastal Wildlife Refuges

Accidents: An accidental oil spill from the proposed activities could cause impacts to coastal wildlife refuges. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water Quality). Due to the distance from shore (56 miles) and the response capabilities that would be implemented, no impacts are expected. The activities proposed in this plan will be covered by EnVen's Regional OSRP (refer to information submitted in Appendix I).

Discarded trash and debris: Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V, the Marine Plastic Pollution Research and Control Act and regulations imposed by various agencies including the United States Coast Guard (USCG) and

the Environmental Protection Agency (EPA). EnVen will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on vessels and every facility that has sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "Think About It" (*previously "All Washed Up: The Beach Litter Problem"*). Thereafter, all personnel will view the marine trash and debris training video annually. Offshore personnel will also receive an explanation from EnVen management or the designated lease operator management that emphasizes their commitment to waste management in accordance with NTL No. 2015-G03-BSEE.

There are no other IPFs (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities that could cause impacts to coastal wildlife refuges.

5. Wilderness Areas

Accidents: An accidental oil spill from the proposed activities could cause impacts to wilderness areas. However, it is unlikely that an oil spill would occur from the proposed activities (refer to Item 5, Water Quality). Due to the distance from the nearest designated Wilderness Area (238 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. The activities proposed in this plan will be covered by EnVen's Regional OSRP (refer to information submitted in Appendix I).

Discarded trash and debris: Operators are prohibited from deliberately discharging debris as mandated by MARPOL-Annex V, the Marine Plastic Pollution Research and Control Act and regulations imposed by various agencies including the United States Coast Guard (USCG) and the Environmental Protection Agency (EPA). EnVen will operate in accordance with the regulations and also avoid accidental loss of solid waste items by maintaining waste management plans, manifesting trash sent to shore, and using special precautions such as covering outside trash bins to prevent accidental loss of solid waste. Special caution will be exercised when handling and disposing of small items and packaging materials, particularly those made of non-biodegradable, environmentally persistent materials such as plastic or glass.

Informational placards will be posted on vessels and every facility that has sleeping or food preparation capabilities. All offshore personnel, including contractors and other support services-related personnel (e.g. helicopter pilots, vessel captains and boat crews) will be indoctrinated on waste procedures, and will view the video (or Microsoft PowerPoint presentation), "Think About It" (*previously "All Washed Up: The Beach Litter Problem"*).

Thereafter, all personnel will view the marine trash and debris training video annually. Offshore personnel will also receive an explanation from EnVen management or the designated lease operator management that emphasizes their commitment to waste management in accordance with NTL No. 2015-G03-BSEE.

There are no other IPFs (emissions, effluents, physical disturbances to the seafloor, or wastes sent to shore for treatment or disposal) from the proposed activities that could cause impacts to wilderness areas.

6. Other Environmental Resources Identified

There are no other environmental resources identified for this impact assessment.

(C) IMPACTS ON PROPOSED ACTIVITIES

The site-specific environmental conditions have been taken into account for the proposed activities. No impacts are expected on the proposed activities from site-specific environmental conditions.

(D) ENVIRONMENTAL HAZARDS

During the hurricane season, June through November, the Gulf of Mexico is impacted by an average of ten tropical storms (39-73 mph winds), of which six become hurricanes (> 74 mph winds). Due to its location in the gulf, West Cameron Block 265 may experience hurricane and tropical storm force winds, and related sea currents. These factors can adversely impact the integrity of the operations covered by this plan. A significant storm may present physical hazards to operators and vessels, damage exploration or production equipment, or result in the release of hazardous materials (including hydrocarbons). Additionally, the displacement of equipment may disrupt the local benthic habitat and pose a threat to local species.

The following preventative measures included in this plan may be implemented to mitigate these impacts:

- 1. Drilling & completion
 - a. Secure well
 - b. Secure rig / platform
 - c. Evacuate personnel

Drilling activities will be conducted in accordance with NTL No.'s 2008-G09, 2009-G10, and 2010-N10.

- Platform / Structure Installation Operator will not conduct platform / structure installation operations during Tropical Storm or Hurricane threat.
- 3. Pipeline Installation

Operator will not conduct pipeline installation operations during Tropical Storm or Hurricane threat.

(E) ALTERNATIVES

No alternatives to the proposed activities were considered to reduce environmental impacts.

(F) MITIGATION MEASURES

No mitigation measures other than those required by regulation will be employed to avoid, diminish, or eliminate potential impacts on environmental resources.

(G) CONSULTATION

No agencies or persons were consulted regarding potential impacts associated with the proposed activities. Therefore, a list of such entities has not been provided.

(H) PREPARER(S)

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(I) REFERENCES

Authors:

- American Petroleum Institute (API). 1989. Effects of offshore petroleum operations on cold water marine mammals: a literature review. Washington, DC: American Petroleum Institute. 385 pp.
- Balazs, G.H. 1985. Impact of ocean debris on marine turtles: entanglement and ingestion. In: Shomura, R.S. and H.O. Yoshida, eds. Proceedings, Workshop on the Fate and Impact of Marine Debris, 26-29 November 1984, Honolulu, HI. U.S. Dept. of Commerce. NOAA Tech. Memo. NOAA-TM-NMFS-SWFC-54. Pp 387-429.
- Burke, C.J. and J.A. Veil. 1995. Potential benefits from regulatory consideration of synthetic drilling muds. Environmental Assessment Division, Argonne National Laboratory, ANL/EAD/TM-43.

- Daly, J.M. 1997. Controlling the discharge of synthetic-based drilling fluid contaminated cuttings in waters of the United States. U.S. Environmental Protection Agency, Office of Water. Work Plan, June 24, 1997.
- Hansen, D.J. 1981. The relative sensitivity of seabird populations in Alaska to oil pollution. U.S. Dept. of the Interior, Bureau of Land Management, Alaska OCS Region, Anchorage. BLM-YK-ES-81-006-1792.
- Laist, D.W. 1997. Impacts of marine debris: entanglement of marine life in marine debris including a comprehensive list of species with entanglement and ingestion records. In: Coe, J.M. and D.B. Rogers, eds. Marine debris: sources, impacts, and solutions. New York, NY: Springer-Verlag. Pp. 99-139.
- Majors, A.P. and A.C. Myrick, Jr. 1990. Effects of noise on animals: implications for dolphins exposed to seal bombs in the eastern tropical Pacific purse-seine fishery-an annotated bibliography. NOAA Administrative Report LJ-90-06.
- Marine Mammal Commission. 1999. Annual report to Congress 1998.
- Piatt, J.F., C.J. Lensink, W. Butler, M. Kendziorek, and D.R. Nysewander. 1990. Immediate impact of the Exxon Valdez oil spill on marine birds. The Auk. 107 (2): 387-397.
- Vauk, G., E. Hartwig, B. Reineking, and E. Vauk-Hentzelt. 1989. Losses of seabirds by oil pollution at the German North Sea coast. Topics in Marine Biology. Ros, J.D, ed. Scient. Mar. 53 (2-3): 749-754.
- Vermeer, K. and R. Vermeer, 1975 Oil threat to birds on the Canadian west coast. The Canadian Field-Naturalist. 89:278-298.

Although not cited, the following were utilized in preparing this EIA:

- Hazard Surveys
- BOEM EIS's:
 - o GOM Deepwater Operations and Activities. Environmental Assessment. MMS 2000-001
 - GOM Central and Western Planning Areas Sales 166 and 168 Final Environmental Impact Statement. MMS 96-0058.

SECTION R ADMINISTRATIVE INFORMATION

A. EXEMPTED INFORMATION DESCRIPTION

Included in the proprietary copy and removed from the public copy of this DOCD are the proposed bottom-hole locations of the planned well, discussions of the target objectives, geologic and/or geophysical data, and any interpreted geology.

B. BIBLIOGRAPHY

Initial Exploration Plan (Control No. N-9377) Initial Development Operations Coordination Document (Control No. N-9517)